

Air Conditioning & Refrigeration News

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IN THIS ISSUE

For the 'Forgotten Man'

About once each year, when new models are being introduced, that "forgotten man" of the appliance industry—the wholesale salesman—comes in for considerable attention. But he's on the job the year around, as any distributor can testify. With 1941 lines coming up, the series of articles on how the wholesale salesman can do a better job, beginning on page 4, is especially timely. The author, H. M. Butzloff, speaks from experience.

Interested In Rebuilding?

With trade-ins a constantly increasing factor in household refrigerator sales, the rebuilding of used models offers enticing extra-profit possibilities to service men. On page 11, the NEWS starts a series of articles describing equipment for a rebuilding plant—equipment that any service man can make in his own shop.

About Heat Exchangers

How the use of suction-liquid line heat exchangers can effect a 15% reduction in operating costs, as well as other benefits in creating greater efficiency in a refrigerating system, is outlined in an article on page 12.

Target: 4,000 Picked Prospects

That's how many business places the air conditioning dealers in Philadelphia have selected to receive their cooperative promotion during the next year. This is but one of the subjects discussed in a story of their meeting on page 7.

Profits Up—Overhead Down

A Columbus dealer has discovered how to build up his business and profits and lower his overhead by renting part of his store to traffic-getting enterprises. Read about his operation on page 9.

No 'Rate Rebate' In Edison 'Icebox' Drive, State Court Rules

NEW YORK CITY—Consolidated Edison Co.'s "Old Ice-Box Roundup" campaign in 1939 was not in violation of the rulings of the New York Public Service Commission, the appellate division of the State Supreme Court has ruled in a unanimous decision handed down Nov. 13.

The City Ice & Fuel Co. and Paul Kurutz had contended that the allowance for old iceboxes made in the drive constituted, in effect, a rebate on their power bills to persons purchasing mechanical refrigerators under these terms, which were not available to persons who did not buy. This, it was charged, constituted an unjust discrimination prohibited by law.

"The principal question which we have to determine," says the decision, "is whether or not the Edison company's contribution toward the"

McLaughlin Leaves Temprite To Join Aircraft Firm

DETROIT—H. B. McLaughlin has resigned as sales manager of Temprite Products Corp. to accept a position as assistant general manager of Rearwin Aircraft & Engines, Inc., Kansas City, Kan.

Mr. McLaughlin, "Mac" to his many friends in the industry, joined the Temprite organization in January, 1933, as Chicago district representative. In November, 1934, he was called to the factory to become chief engineer, serving in that post until December, 1937, when he was named sales manager.

Plan Suggests Electric Bureau For Public, Trade

Would Offer Information To Public, Be Arbiter In Trade Disputes

CHICAGO—Formation of an Electrical Information Bureau in every city in which electric power is sold, to inform the public of the manifold benefits to be derived from the use of electricity, was proposed in an address delivered jointly by J. E. North, president, and Ralph H. Jones, secretary, of the Electrical League of Cleveland, at the recent convention of the International Association of Electrical Leagues here.

This bureau, according to the proposal, should be so organized that it not only will answer the limited number of questions which might be directed to it, but will serve equally well to promote commercial and social relations within the industry itself, and do much to improve the relations of industry with the public.

The job of setting up such information agencies to advance the public relations work of the electrical industry was suggested as a joint project by National Electrical Manufacturers Association, Edison Electric Institute, and the International Association of Electrical Leagues.

Declaring that the American public does not have more than a vague understanding of the manufacture of electrical merchandise or the problems in connection with the production and distribution of electrical energy, the Cleveland league men advocated the Information Bureau as a means of combatting "the unmerited criticism and abuse" to which the electrical industry is being subjected "on a constantly increasing scale."

"An Electrical Information Bureau will find only a very small part of its time devoted to the answering of questions," the report declared. "Consequently, we must be ready to volunteer, without appearing to do so, much related information which will be helpful to the industry which supports our efforts, and which will result in plus business for all concerned."

"For example, there are times when it can serve as an ambassador of goodwill in ironing out difficulties and minimizing differences between the public, the manufacturer, the wholesaler, and the retailer, and this creates a better understanding for all concerned, as well as a feeling of friendliness."

"We in Cleveland have not found it desirable to undertake the solution of trade questions nor to attempt a cure-all for the ills of business. We have remained strictly aloof from any attempt to legislate, regulate,"

(Concluded on Page 2, Column 1)

Philco Gross Sales Top 40 Million In 10 Months

PHILADELPHIA—Gross factory sales of Philco Corp., exclusive of its Canadian subsidiary, totaled \$40,933,890 in the first 10 months of this year, as compared with \$32,888,700 in the same period of 1939, an increase of 24%, reports Larry G. Gubb, executive vice president.

Most pronounced gains have been made in radio-phonographs and refrigerators, Mr. Gubb said, with refrigerator factory sales in 1940 nearly three times what they were a year ago. Sales of radio-phonographs during the period were nearly five times their corresponding 1939 figure, he added.

It is expected that present gains will be maintained for the balance of the year, Mr. Gubb said, and that total 1940 sales will be the largest in the company's history.

Smoked Fish Ruling Sounds Need For New Fixture

NEW YORK CITY—Increased use of refrigeration equipment among retail establishments handling smoked fish is seen as a result of a campaign recently instituted by the New York City board of health to require refrigerated storage of such products. Commonest varieties of smoked fish now being offered for sale here include salmon, whitefish, sturgeon, mackerel, and herring.

Health department agents have been instructed to consider 50° F. as the maximum temperature acceptable for effective refrigeration, according to Deputy Health Commissioner Abramson. This, it is said, may open the way for a new type of refrigerated fixture, since the conventional display case is in most cases too large for the average so-called "appetizer store." Such cases also are designed to maintain a temperature of 40° F., and often are considered too expensive for stores of this type.

Good results have been obtained with plate coils in open display, and with small forced-air units in double-glass enclosed counters, it is reported. The latter are said to be preferable to the board of health, since they keep the food from outside contamination, and insure proper temperatures no matter how high the product is piled.

Air Conditioning For Blast Furnace Ends 'Weather Guessing'

PITTSBURGH—Air conditioning equipment capable of removing from 7 to 40 tons of water per day from the air blown into one of the world's largest blast furnaces, in order to more closely control the quality of the iron produced, is to be installed on the No. 1 blast furnace at the Aliquippa Works of the Jones & Laughlin Steel Corp.

This is the first modern air conditioning unit to be installed in the north for conditioning the air blown into a blast furnace. A similar system was installed in 1939 by Woodward Iron Works, Woodward, Ala. The equipment will be used to maintain a constant low moisture content in the air blast, eliminating the necessity of trying to out-guess the weather 24 hours in advance of charging the furnace.

Due to the fluctuating moisture content of the atmosphere, operators must constantly change the proportions of raw materials in the charge.

(Concluded on Page 15, Column 1)

Extra Storage Space Is Keynote Of Crosley's 8-Model '41 Line

Standard Air Cond. Dropping Out of Conditioner Field

NEW YORK CITY—Standard Air Conditioning, Inc., a division of American Radiator & Standard Sanitary Corp., is now in the process of liquidation, according to W. G. Christie, an official of the company. Standard Air Conditioning, Inc. produced a wide range of air conditioning equipment, including year-around systems in various sizes, and unit air conditioners.

95,000-Unit October Puts Year's Sales Over 1937 Record

DETROIT—World shipments of household electric refrigerators reached an all-time high for October of approximately 95,000 units, sending the total for the first 10 months of the year to 2,606,000 units, according to estimates by AIR CONDITIONING & REFRIGERATION NEWS. October was the sixth consecutive month this year in which a new monthly record of shipments was reported.

October world shipments were just 17,000 higher than the previous record for the month, 78,000 units, (Concluded on Page 15, Column 2)

October Refrigerator Tax \$321,487

WASHINGTON, D. C.—Excise tax collections on mechanical refrigerators during October totaled \$321,487, according to statistics reported by the U. S. Bureau of Internal Revenue.

Baseball's 'Buddy' Myer Stars In Xmas Appliance Selling With 'For Men Only' Plan

JACKSON, Miss.—"For Men Only" might well be the Christmas refrigerator sales slogan of Better Living Appliances, G-E dealer here—for the company's holiday promotion concentrates on the heads of families, and has paid out to the tune of 100

Re-Styled 'Shelvador' and 'Moist Cold' Section Top List of Sales Features

CINCINNATI—A line of household refrigerators for 1941 covering four 6-foot and two 8-foot models, in addition to apartment house 3 and 4-foot models, and placing emphasis on food storage convenience and protection to a degree never approached in previous models, was introduced to more than 200 Crosley distributors and their men at Crosley Corp.'s annual convention Monday (Dec. 2) at the Taft theater.

Heralded as meeting the fundamental needs "not only of the user but also of those who sell it," the 1941 Crosley line is said to follow the trend in consumer buying habits by providing extra space for bottles, frozen foods, meats, fish, game, and other food items.

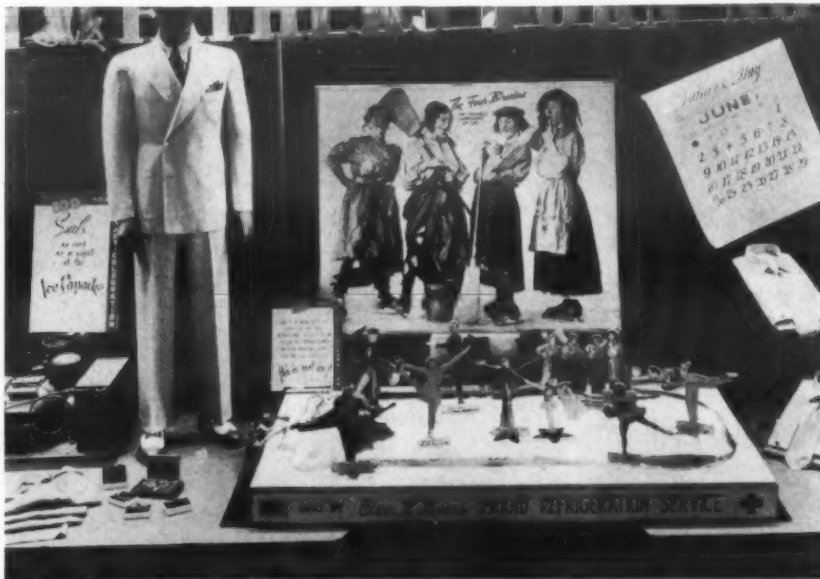
Foremost in Crosley's greater attention to food accessibility is the patented new "Super Shelvador," a distinct improvement on the "shelves-in-the-door" idea heretofore used by the company. In contrast to last year's wire-basket shelves, the 1941 Super Shelvador incorporates Dulux-finished steel shelves with bottoms removable for easy cleaning. Without sacrificing of food chamber space, it is possible to place, in the new Crosley door alone, practically enough food to fill an ordinary refrigerator, it is claimed.

One of the door shelves is an all-steel bottle rack that accommodates eight 12-ounce bottles. This innovation, together with extra bottle space near the refrigerator's cooling unit, is said to give the 1941 Crosley almost three times as much bottle storage capacity as comparable-sized 1940 models had.

The Crosley "Croselite" door-liner is a one-piece plastic liner, finished in Dulux for easy cleaning. The door's thick protecting wall of Fiberglas and the Croselite door-liner are designed to assure maximum insulation and economical use of

(Concluded on Page 16, Column 1)

A Miniature Ice Skating Rink



Equipment left over from the original installation in New Orleans' municipal auditorium was used in this miniature skating rink, an exact reproduction, built by George W. Mims of Frigid Refrigeration Service. It was displayed as advance publicity for a skating revue.

refrigerator-gift sales during the past two years, with a commensurate volume of ranges, washers, and ironers.

Another newsworthy note about this dealership, in addition to its unusual Christmas sales record, is the fact that its president is "Buddy" Myer, second baseman of the Washington Senators, who evidently is a "big-leaguer" in more ways than one. His partner, and full-time manager of the dealership, is John Bruno.

"Practical dollars" is the holiday theme at Better Living Appliances—backed up by clever and effective use of the telephone, direct mail, and a thorough follow-up of all the year's prospects, all aimed at promoting the idea of a refrigerator as an ideal Christmas gift.

After Thanksgiving Day, Better Living Appliances' four salesmen work on Christmas promotion exclusively—with the idea that an early start means more time in which to put over the idea with doubtful buyers. Their prospects are, for the most part, heads of families previously contacted; the latter making up the most logical type of holiday refrigerator buyer. At Christmas time, they sell the idea of "killing two birds with one stone" with the purchase of the gift refrigerator. Every Christmas sale has been made through a personal call; in the opinion of Manager Bruno, this is the only way to sell the idea.

(Concluded on Page 16, Column 3)

Help Interpret Industry to Public, Leagues Urged; Cleveland Program Directed Toward This Goal

(Concluded from Page 1, Column 2) investigate, or do a policing job for any group. We believe that we should use our best efforts to discourage unethical and unfair trade practices, but we know that it is impossible to persuade all people to practice the Golden Rule.

"We may suggest and recommend, if we are asked for an opinion, but we will not sit in judgment and penalize."

Cooperation with the programs of such groups as the builders' exchange, architects, speculative and contract home builders, and apartment house owners' association, and the office building managers groups has paid the Cleveland association real dividends in goodwill and in benefits to the electrical industry, the speakers declared.

SOME LEAGUE ACTIVITIES

Among its successful activities, all undertaken with an eye to bettering public relations by teaching the benefits of the use of electricity, are:

1. Effective speech classes for club women. In these classes are taught the fundamentals of effective speech, and officers and members of women's clubs are invited to enroll. In return for the instruction given, class members agree to present a talk on an assigned electrical subject to the student's own club or to some other club. To date, more than 2,000 women have taken the courses—and students have given more than 2,500 talks on some electrical subject to audiences numbering approximately 150,000 club women.

2. Electrical home bureau. This division of the league offers free help to builders, architects, and home owners, including wiring diagrams, suggestions for home lighting, layouts for electric kitchens in both new and existing homes, etc. Twenty-six of the 27 apartment house projects erected in Cleveland during the past three years have used electric ranges and refrigerators; in 1940 alone, every one of the 17 apartment buildings erected used all-electric kitchen equipment, involving more than 500 refrigerators and ranges.

3. Home lighting. More than 40 home lighting advisors, working out of league-member dealers' stores, have improved lighting conditions in more than 340,000 homes, and have sold for dealers more than a million bulbs.

CLASSES FOR TEACHERS

4. Classes for home economics teachers. Special classes are held periodically for home economics teachers for the demonstration and use of the electric range, refrigerator, and table cooking appliances. Similar training classes for students are held on Saturday mornings.

5. Training classes for salesmen. Available only to league-member company executives and salesmen, these courses cover the principles of salesmanship, and are held at frequent intervals throughout the year.

6. Speakers bureau services. Electrical subjects of general interest (home planning, decorating, equipping and operating the home, air

conditioning, kitchen planning, etc.) have been prepared for presentation to club groups and associations, who request the services of a speaker for group meetings. Staff speakers have presented such talks to more than 41,000 people this year.

ORGANIZED PUBLICITY

7. Organized publicity. News releases are prepared, including photographs, showing the actual application of electrical appliances for home use and factory installation. This year, more than 14,000 column inches of reading matter has appeared in Cleveland publications.

8. Booklets and folders. The league has prepared its own booklets and folders for general distribution, covering the uses of electrical appliances in the home, to augment manufacturers' literature. More than 800,000 pieces have been distributed this year.

9. Advertising. A continuous program of advertising is carried on in three daily, 28 community, and 24 foreign language newspapers, to sustain and stimulate interest in electrical appliances and service. More than 17,000 inches have been used so far this year. In addition, cooperative advertising is made available for special campaigns.

INFORMATION BUREAU

10. Information bureau services. This includes information of where appliances may be purchased or serviced, styles and types available, price ranges, and related information. Requests for this information have been received from more than 35,000 sources this year.

11. Advisory services to commercial and industrial organizations. This includes surveys of lighting conditions in stores, offices, and factories, upon request, and suggestions for improvements in various types of electrical installations.

12. Home service division. Work of this division consists of rendering assistance to new appliance users, including instruction in operation and maintenance.

13. Participation in shows, exhibits, and displays. This includes participation in Cleveland's annual Food Show, a permanent exhibit at the Builders' Exchange, displays at the Home and Flower show, Better Homes Exhibits, etc. The league contracts for space to be used and mans the exhibits; league-member distributors usually participate on a 50-50 basis.

ALL-YEAR WINDOWS

Special window displays also are maintained in a high-traffic location on Euclid Ave., and are rented to member manufacturers and distributors for the showing of league-approved equipment. Displays are seasonal in character, and are changed from month to month. Whenever possible, equipment shown coincides with current league promotional activities.

The league pays for the maintenance and lighting of the windows, and displays installed by distributors and manufacturers are subject to

approval by a window display expert.

In addition, a calendar of events is prepared, encompassing any national or local celebration of significance in the community, and plans are made for some sort of active participation by the league from an "electrical angle."

Another of the Cleveland league's "added services," the speakers pointed out, is the conducting of surveys on various industry matters. As an example, in response to a query regarding the percentage of mechanical refrigerator trade-ins, a study of both buyers and sellers was made during several days in October, and a figure of approximately 11% for mechanical trade-ins arrived at for that period.

PROPOSES NATIONAL CONTEST

In a final summing up of the electrical industry's public relations responsibilities, Mr. North declared that he believed the industry could well afford to promote a contest, offering \$25,000 in prizes with \$10,000 as top award, for the best consumer statement on the subject, "Electricity Is Indispensable and Inexpensive," or "Electricity Is Cheap, and I'll Tell You Why."

Announcement of such a contest not only would attract the attention of millions of people, but would cause them to do some "bread and butter" thinking which would certainly result to the benefit of the electrical industry, Mr. North declared.

How Leagues Get Dealers To Work Together

Electrical leagues should assume the leadership in trade relation activities as an important industry service, declared W. A. Ritt, secretary-manager of the North Central Associated Electrical Industries, in discussing means through which these relations could be improved.

Trade relation activities, the speaker declared, should encompass all branches of the industry—dealers, distributors, jobbers, contractors, engineers, architects, service men, and others.

Important in promoting better relations with dealers, Mr. Ritt said, is to give them a voice in the planning of all campaigns and promotions. Any so-called "cooperative" drive, he declared, must have the backing of dealers in order to succeed.

Another means of bettering dealer relations, he continued, is to suggest means on how their sales work can be improved. In the North Central association, the effort is one of service rather than patronization, he said. The league hears dealer complaints, and brings them to the attention of other branches of the industry through which they can be corrected.

ACCOUNTING CLASSES

Other services of the league include educational accounting for dealers, sales training classes, and efforts to prevent the diversion of appliance business from legitimate retail channels. Such services also are now being performed by leagues in several sections of the country, he pointed out.

In working with distributors toward better trade relations, "open houses" at trade shows and exhibi-

Looking Southward



C. J. Otterholm of McQuay, Inc. is shown here during the recent Dairy Show in Atlantic City with George H. Colin of Ad. Auriema, Inc., export agent for the company, who will introduce McQuay's new Icy-Flo sweet water milk cooler to outlets in Brazil and Argentina.

tions have proved important goodwill mediums, he reported. Manufacturers, he emphasized, must be approached as a group. Assisting them in the promotion of trade shows has done much to bring the various elements of the industry into closer cooperation and understanding of each other's problems, he said.

Above all, he declared, the league must win and merit the confidence of all the elements in the industry if it is to be successful in promoting better relations between them.

"Gridiron" dinners, to which all branches of the industry are invited, have proved an effective means of straightening out kinks in inter-industry relations, E. P. Zachman, business manager of the Cincinnati Electrical Association, told league members in an address stressing the importance of social activities as goodwill builders.

At these "gridiron" meetings, usually held during Christmas week, the master of ceremonies has an opportunity to bring to light various "private chisels" and other rather perplexing problems which are difficult to deal with in a routine manner, all in a spirit of fun and good fellowship.

'RAZZ' SESSIONS EFFECTIVE

When the problems are presented in this manner, Mr. Zachman said, none of the persons affected seems to take offense—and a good deal of the unwelcome practices are stopped without necessity for further action on the association's part.

Picnics and other fellowship meetings have been found another way in which to promote industry good feeling, Mr. Zachman said. On such occasions, the association rule is to let members have pretty much their own way, with any formal program strictly banned. Attendance at such affairs has been considerably increased, he said, by letters to wives of association members, inviting them to "come and bring your husband."

PROMOTING XMAS BUYING

Electrical leagues should take the lead in the promotion of Christmas buying, declared G. E. Lewis, manager of the Rocky Mountain Electrical League. Not only do such activities help business for league members, he added, but they serve to stimulate all retail business as well.

Biggest aid to starting holiday sales, Mr. Lewis said, is his league's annual Christmas lighting activity, which this year was started on Nov. 21. Last year's lighting activity, he recalled, pulled holiday business throughout the entire territory out of the doldrums which unseasonably warm weather had caused.

The Christmas lighting activity is inaugurated in Denver and is later taken to lesser cities in the territory. Each local activity of this sort invariably is started on the town's main street, with other business districts providing a final roundup to the campaign.

Stressing the showmanship value of doing the unusual in all league activities, Mr. Lewis cited one instance in his own territory where considerable interest and publicity had resulted from the serving of deer and antelope tidbits as "samples" in an electric roaster promotion. Prospects who'd never expect to serve such meat in their own homes visited the exhibit to sample it . . . and got the electric roaster sales story.

Holiday Buying To Be Heaviest Since 1929

NEW YORK CITY—With the Christmas shopping season now definitely under way, the National Retail Dry Goods Association estimates that dollar sales this year, in most retail lines, will exceed that of 1930, and come within shooting distance of the 1929 record. Physical volume of merchandise moved this year will be the heaviest on record, the N.R.D.G.A. says, but lower prices will keep the dollar volume below the 1929 high.

Figured on the basis of an estimated increase of 8%, department store sales during the four weeks from Thanksgiving to Christmas are expected to total \$1,350,000,000.

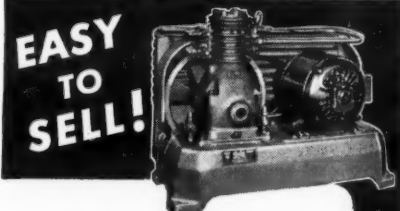
It is believed likely that there will be some increase in luxury buying this year, but mainly the interest will be in regular holiday merchandise.

Essex League Christmas Party Set For Dec. 12

NEWARK, N. J.—Thirteenth annual Christmas luncheon of Essex Electrical League, and presentation of the Community Christmas Tree to the people of Newark, will be held at 12:30 p.m. Dec. 12 in the grand ballroom of the Robert Treat hotel.

Guest speaker at the luncheon will be William H. Speer, general attorney for Public Service Corp. of New Jersey.

BUNDY TUBING DETROIT



More than 20 years of high reputation...in every kind of refrigeration service...has established the name "Lipman" as a BUY word that breaks down sales resistance. Make this reputation your sales asset . . . for greater profit and better customer satisfaction.

Lipman
GENERAL REFRIGERATION DIVISION
Yates-American Machine Co.
Dept. AC-1 Beloit, Wisconsin

Tripl-Seal Diaphragm Valve

Because of the small amount of operating movement in our Diaphragm Valve, the multiple diaphragm is never deflected past its normal center. This greatly prolongs its life. A single turn only is necessary to open or close.

Valves are furnished in two-way, three-way and angle type—flared or solder type ends—and in complete range of all necessary sizes.

We extend you a cordial invitation to see and examine these valves at our booths Nos. 120 and 121 at the All-Industry Refrigeration and Air Conditioning Exhibition, Stevens Hotel, Chicago, Jan. 13-16, 1941.

MUELLER BRASS CO.
Port Huron, Michigan

THERE IS AN ANSUL JOBBER NEAR YOU, READY TO SERVE YOU BETTER!

The border, the gulf, the two salt seas, the vast stretch of America in between—wherever you are, there is an Ansul Jobber conveniently near with adequate stocks of Ansul gases. We commend to you this Jobber's friendly service. He is ready, today, to serve you better.

If you do not know the Ansul Jobber in your region, write us for his name and address today.


ANSUL CHEMICAL COMPANY, MARINETTE, WIS.
AC-34 Agents for Kinetic's "Freon-12"

ANSUL SULPHUR DIOXIDE
ICE-X
METHYL CHLORIDE

Anaconda Copper Refrigeration Tubes

"Assembling instructions"—details page 11 of new book

THE AMERICAN BRASS CO.
FRENCH SMALL TUBE BRANCH
General Offices: Watertown, Conn.



More prefer G-E than any other Refrigerator

HERE'S THE PROOF: More people prefer the General Electric Refrigerator than any other make, according to recent independent consumer surveys made by four national magazines among refrigerator owners and prospective buyers. The table at the right shows that when people were asked what refrigerator they preferred or would buy, *over 50% more* named General Electric than mentioned the next leading brand.

% Distribution of Brand Preferences According to Surveys:

	Magazine No. 1	Magazine No. 2	Magazine No. 3	Magazine No. 4
General Electric Refrigerator "B"	38.8%	32.2%	29.4%	25.8%
Refrigerator "C"	15.7	25.6	18.0	19.6
Refrigerator "D"	11.9	6.0	13.6	11.5
Refrigerator "E"	6.7	9.5	9.5	9.4
Refrigerator "F"	11.2	5.9	7.5	8.6
Refrigerator "G"	....	5.5	6.3	6.4
Refrigerator "H"	4.5	5.6	6.2	8.2
All Others	....	1.9	2.2	3.7
	11.2	7.8	7.3	6.8
	100%	100%	100%	100%

When you get the Price-Product-Promotion facts on 1941 General Electric Refrigerators at the Dealer Previews you will see why Public Preference for the General Electric will be even greater next year!



GENERAL  ELECTRIC

'Model' Time-Pay Law Competition Decried By Credit Speaker

COLUMBUS, Ohio—While efforts to protect the public against sharp practices on the part of certain types of instalment retailers are highly desirable from a social point of view, a current tendency among some sponsoring groups to compete in the proposal of "model" instalment selling laws should be "roundly condemned," J. Anton Hagios, manager of the credit management division of National Retail Dry Goods Association, told the second biannual Institute on Credit here recently.

The speaker said it was a "deplorable fact" that some of the proposals for model state legislation now being drafted evince a tendency on the part of the sponsoring groups to promote legislation which, if enacted, would serve mainly to restrict the activities of some other group, rather than to set up a forthright and honest pattern under which all groups can operate efficiently and without opportunity for abuse.

Efforts by one group in the credit field to put legislation onto the books restricting one group as against the other, provide a natural reaction on the part of the restricted group to work for legislation which in turn will confine the operations of their competitors, Mr. Hagios pointed out. The resulting vicious circle can only lead to unnecessary and hampering laws for all, he said. "Equitable and practical instalment legislation would make clear distinctions between the functions of commercial banks and sales finance companies, small merchants and small loan companies. But even the most ideal type of legislative regulation cannot be considered a complete solution to the problem of abuse."

Self-regulation against instalment selling abuses is vital to the protection of the consumer, whether regulatory laws are passed or not, he continued.

He named two steps along which self-regulation of instalment selling has progressed in the retail field during the past few years:

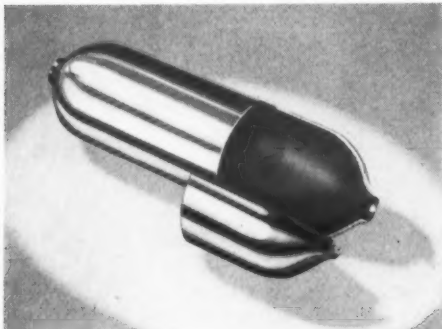
1. Simplification of the instalment contract, to afford more equal protection to the buyer and seller, and to make it easily readable and understandable by the customer.
2. Development of a better method of quoting the carrying charge to the customer.

WROUGHT COPPER STREAMLINE SOLDER FITTINGS

These fittings are manufactured to very close capillary tolerance. The solder cups are of ample length and soldering surface, well within the strength limits for soldered areas as determined by the National Bureau of Standards. Extra strength is provided where it is most needed. Copper tees and elbows are fitted with heavy paper board caps, which provides cleanliness and protection.

Our complete line is on display at booths Nos. 120 and 121 at the All-Industry Refrigeration and Air Conditioning Exhibition, Stevens Hotel, Chicago, Jan. 13-16, 1941.

MUELLER BRASS CO.
Port Huron, Michigan



Cut-away view of one of Wolverine Tube's new accumulator shells. The O.D. of this particular unit is 2".



WOLVERINE TUBE COMPANY
DETROIT, MICHIGAN

Selling 'Through the Dealer' Rather Than 'To the Dealer'

The Function of the Wholesale Salesman



H. M. Butzloff, author of this series of articles, was formerly sales development manager of the Westinghouse household refrigerator division. Before that he had many years of experience in the field distribution end of the household electric refrigeration business, with Westinghouse, and with the old Stover Co., original Frigidaire distributor in the Chicago area.

As the new lines of refrigerators are about to be introduced, AIR CONDITIONING & REFRIGERATION NEWS believes that this series of articles, which tell how a wholesale salesman can do a better job, is particularly timely.

Point of Mr. Butzloff's article is to show how a wholesale salesman can sell "through the dealer," rather than "to the dealer."

By H. M. Butzloff

A good fisherman puts in a great deal more time studying the habits of the fish than he does fishing, and when he goes fishing he brings back a good catch—all for the simple reason that he was thoroughly prepared. He always knows whether the fish are in the middle of the lake, down the river, or below the dam.

Another fisherman who does not know fish habits can be out all day from 5 in the morning till 5 in the evening and never get a nibble.

Selling wholesale to dealers is like that. If a wholesale salesman does not know where to go, how to go, and the problems of retail distribution, he will be like the fisherman who gets hardly a nibble.

With the brilliant colored lures and fancy bait now available, fish are now caught differently than they were years ago. Likewise, retailers are not attracted by "horse and buggy" sales tactics.

It was once quite common practice for a sales manager to equip his salesmen with the catalogs and no other education than the simple instruction to:

- (1) Sell the company.
- (2) Sell the product.
- (3) Sell the service.

But that advice is outmoded now because business is different:

- (1) Business is more competitive.
- (2) Good companies make good products.
- (3) Competitive products are good.
- (4) Prices and discounts are about the same level—they are standardized.

So what do we find today? Probably 10 or more salesmen calling on a dealer to get his business, and if you are one of them, then you have only one chance in 10—because most dealers are not going to split their business 10 ways.

In this day of merchandising when there are so many non-exclusive accounts, it is quite a common thing to find that a private brand or a little-advertised line of refrigerators,

for instance, stands out and does a bigger volume than the others. I have heard managers discuss the subject pro and con—I have heard them express wonder that a practically unknown refrigerator was outselling a nationally advertised brand.

Why? When you trace the thing back, you find almost invariably that it is the result of the work of some good wholesale salesman of the little-known product who has sold himself to that dealer.

Experience has shown that with dealers handling several makes of refrigerators, for example, the wholesale salesman who gets the most business is the one who SELLS HIMSELF. A dealer does not buy merchandise from any firm unless he has confidence in the salesman selling him.

So let's modernize the old axiom and put down as the first requisite for a good wholesale salesman—SELL YOURSELF.

There are many ways in which this can be done. All we can presume to tell you here are a few fundamentals.

One of the first rules in selling yourself is "be friendly"—"be human"—a dealer appreciates your sincere interest in him. There are other basic qualities—such as courtesy, honesty, willingness to work—which should be possessed by every wholesale salesman, but the real need in selling yourself can be summed up in four general principles.

I. KNOW YOUR PRODUCT

Although as a wholesale salesman you may handle a number of products, you gain confidence of the dealer by a thorough knowledge of the products you sell him.

Your very knowledge of the details of its operation and its superiority over others marks you as a man who "knows his stuff"—an expert in your line. You SELL YOURSELF by radiating knowledge.

II. KNOW THE DEALER'S BUSINESS

You again sell yourself by being able to offer your services in the solution of some knotty problem in the dealer's business.

Very few salesmen were ever continuously successful in selling wholesale, who didn't know something about the business of their dealers.

The thinking, the merchandising principles, the profit margins required, are entirely different in a hardware store than in a department store.

It requires a different type of technique to sell the furniture man than that used to sell the electrical dealer.

So the wholesale salesman must know something about this business of merchandising electrical appliances through the various outlets if he is to sell merchandise in large volume.

A dealer from a Tennessee city came into my office one day last summer and among other things that were discussed, he related the following:

A competitive distributor had discovered some people with money, and had set them up in the appliance business in this dealer's city. This new dealer had been allowed to drift with no guidance at all until finally in desperation they had come to him—their competitor—for advice on practices and methods in the appliance business.

The man relating this incident pointed out to me the deplorable fact that the distributor who had set this new dealer up in business had failed to render them the service of counseling with him on how the various functions of his business operate, through a well qualified wholesale salesman.

Another matter of importance is to know something about what it takes to run the dealer's business. Do you, as a wholesale salesman, know the cost of doing business in your various types of outlets? Do you know what a dealer should pay for rent? Do you know what he should spend for advertising? There are many other things on which a dealer needs advice and counsel and the best place he can get it is from a good wholesale salesman.

When you understand the customer's business, then the selling of merchandise in volume will become a great deal easier for you because you will think of selling them in terms of a year's volume instead of one or two or three refrigerators or ranges at a single call. Therefore, to be really successful, you must know the dealer's business, so you can recommend to him proven and sound business practices.

III. BE AN 'IDEA-MAN'

The next way to SELL YOURSELF is to be an "idea man."

In talking with dealers, questioning revealed that they welcomed men to call on them who were "idea" men—men who could bring them new slants on merchandising—such as a suggestion for better window displays, a plan to get more prospects, a new idea on advertising or a promotional plan. Retailers are hungry for ideas if they are sold with enthusiasm.

If what wholesale salesmen tell us is true, and I have no reason to doubt it, you spend, on the average, two hours every two weeks with each major account. That account must be made to produce between your calls.

A most effective way to accomplish this is through ideas. Spending only two hours out of two weeks with an account, it seems only reasonable that you should strive to leave at least one merchandising idea with the dealer every time you visit him.

Be an IDEA-MAN—you sell ideas, not merchandise—and this in turn, will sell merchandise in volume.

A grocery salesman was making his rounds as usual. Business was only fair. He made his regular quota of calls. What was he doing now to get business? His usual approach was, "Mr. Merchant, you need a case of Campbell's Tomato Soup. It's all right if I put you down for one, isn't it?" And he usually got the order, but no increase from week to week.

Contrast his approach with that of a salesman who merchandises ideas and lets the orders fall where they will. This salesman approaches the dealer with enthusiasm, with a smile, and asks: "How would you like to sell 10 cases of Campbell's Tomato Soup next week?" Then proceeds to outline an idea to merchandise those 10 cases of tomato soup.

Which plan would sell more merchandise? The latter, of course. When you ask a dealer "How would you like to sell 10 refrigerators next week?" you have his interest right off the bat. If you merely ask him to buy the usual number of refrigerators, he immediately puts up the old resistance—then you complain

that he is a tough customer. So—BE AN IDEA-MAN.

IV. DON'T FORGET TO ASK FOR THE ORDER

Be a good closer—actually get the order for merchandise. This will be a natural sequence if you sell yourself.

Therefore, SELL YOURSELF. Make the dealer feel that you, and only you, can take care of his problems. You will sell your product when you sell yourself.

You will sell yourself into your dealer's confidence when you demonstrate that you know your product and its superiority over others.

You will sell your way into the heart of your dealer when you make him realize that you have an understanding of his business and are helping him promote it in a sound and business-like way.

You will sell yourself into the everlasting appreciation of a dealer when you sell him ideas and not merchandise.

Defense Refrigeration Needs May Reach 25,000 Units

WASHINGTON, D. C.—Preliminary negotiations have been initiated by the Procurement Division of the Treasury Department for mass purchases of household equipment to be used in carrying out the National Defense Housing Program.

Items to be purchased include refrigerators, cook stoves, hot water heaters, space heaters, furnaces, and range boilers, with other products to be added by the Federal Works Agency to the existing list.

According to present estimates, approximately 25,000 of each item will be required, although revisions may be made as construction goes forward.

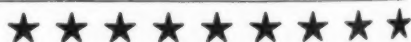
C.I.T. Sets Up Divisional Offices in Detroit

DETROIT — To handle the increased business resulting from industrial expansion and mounting sales in the Detroit area, the CIT Corp., subsidiary of Commercial Investment Trust Corp., has established new divisional headquarters here.

E. L. Sholz of Detroit has been elected a vice president of the company and has been named manager of the new division, which includes Indiana as well as Michigan.

Mr. Sholz has been Michigan district manager for the past six years. He has been associated with the company for 10 years.

Other CIT promotions include the naming of S. Gordon Smith as Detroit branch manager; J. B. Muhltner, motor sales supervisor; and P. F. Franklin, home modernization sales supervisor.



Mills Condensing Units
By Mills Novelty Company
4100 Fullerton Ave., Chicago, Ill.



**CASCADING COLD...TRIGGER CONTROLLED
GUN COOLERS**
EACH A STREAMLINED
POWER PLANT OF COLD

Write for
full details
today

**Peerless
OF AMERICA INC.**

Midwest Factory General Offices—515 West 35th Street, Chicago
Branch Offices: New York, Los Angeles, Dallas, Export Div., Detroit



Westinghouse MEANS BUSINESS IN 1941!

**...and it's YOUR BUSINESS
we're talking about!**

Everyone says 1941 is going to be a great refrigeration year. We say it's going to be a great *Westinghouse* year! That's *our* business—but you can make it *YOUR* business as well. Read what Westinghouse is doing about it. Then *do something about it yourself!* Write, wire or call your Westinghouse Distributor. Keep posted on developments that are going to put Westinghouse Dealers over with a bang on the *money side* of the refrigerator business!



NEW PRODUCTION CAPACITY!

Westinghouse is increasing production capacity on 1941 refrigerators through a \$1,500,000 building program at Mansfield. This includes a new metal stamping plant and a new warehouse to release present warehouse space for production. **YOU** can share in the dividends this investment is going to pay!

RADICALLY NEW PRODUCT!

Westinghouse design and laboratory engineers have been working for a solid year to give you the finest, most salable, most foolproof product ever offered to the public. When you see it, you'll forget there ever was anything called an electric refrigerator before! And it's **YOURS** to **SELL** at a **REAL PROFIT!**

NEW, GREATER PROMOTIONS!

Westinghouse sales promotion and advertising for 1941 has been planned to hit a new high in force and convincing power! Every detail is designed to turn the spotlight on Westinghouse and Westinghouse Dealers as never before! It not only *delivers* prospects—it helps you *sell* them—at a **PROFIT!**

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
MERCHANDISING DIVISION, Dept. 260 MANSFIELD, OHIO

WE'RE PRODUCING!

...the most popular line of
ELECTRIC REFRIGERATORS
in Westinghouse History!

WATCH WESTINGHOUSE IN 1941!



Westinghouse Refrigerators

FROM THE *Leisure Line* OF ELECTRIC HOME APPLIANCES

Midwest Extends Reach-In Cabinet Line To 13 Models; Adds Convenience Features

GALESBURG, Ill.—Several new reach-in units, lower prices on display cases, including all-porcelain units, and a number of refinements in appearance and construction characterize the 1941 line of commercial equipment now being introduced by Midwest Mfg. Co.

Addition of new reach-in units brings that series to 13 units, ranging in size from 12 to 71-cu. ft. capacity, one of the most comprehensive on the market, claims J. C. Battles, sales manager. Prices of some units also have been reduced.

Increased production and plant efficiency, especially in the porcelain department, is said to have been responsible for lowered costs on display case models in the 1941 series. Literature and prices covering the new line will be available within the next two weeks.

Eight units in the reach-in series are self-contained, while the remaining five are designed for remote compressor installation. Most models also may be had with special key device door lock, glass doors, meat doors and meat hooks, and other special features, if desired.

Complete reach-in series is as follows:

Model 120—12-cu. ft. capacity, 19.1 sq. ft. of shelf area, self-contained unit, two doors, Dulux exterior, ice maker or blower equipment optional.

Model 160—16 cu. ft. net, 25.5 sq. ft. of shelf area, self-contained, two doors, Dulux exterior, ice maker or blower.

Model 138—13½ cu. ft. net, 22.3 sq. ft. shelf area, two doors, self-contained, Dulux, porcelain, or stainless steel exterior, ice maker or blower.

Model 168—16 cu. ft. net, 26.3 sq. ft. shelf area, two doors, self-contained, Dulux, porcelain, or stainless steel exterior, ice maker or blower.

Model 198—19.5 cu. ft. net, 31.5 sq. ft. shelf area, two doors, self-contained, Dulux, porcelain, or stainless steel exterior, ice maker or blower.

Model 25—28 cu. ft. net, 32.5 sq. ft. shelf area, three doors, self-contained, Dulux, porcelain, or stainless steel exterior, ice maker or blower.

Model 32—32 cu. ft. net, 43.3 sq. ft. shelf area, four doors, self-contained, Dulux, porcelain, or stainless steel exterior, ice maker or blower.

Model 30—35 cu. ft. net, 36.1 sq. ft. shelf area, four doors, remote, Dulux, porcelain, or stainless steel exterior, blower or ice maker.

Model 46—46 cu. ft. net, 63 sq. ft. shelf area, four doors, self-contained, Dulux, porcelain, or stainless steel exterior, blower or ice maker.

Model AP44—44 cu. ft. net, 51 sq. ft.

shelf area, four doors, remote, porcelain or stainless steel exterior, overhead fin coil, also available with knocked-down construction (model AP45-KD).

Model AP66—66.85 cu. ft., 81 sq. ft. shelf area, six doors, remote, porcelain or stainless steel exterior, overhead fin coil, also available with knocked-down construction (model AP68-KD).

Model 700—71.5 cu. ft. net, 90.8 sq. ft. shelf area, six doors, remote, Dulux, porcelain, or stainless steel exterior, blower coil.

Model 700-B (dough retarder model)—71.5 cu. ft. net, 28 sq. ft. shelf area, two long doors, two small doors, remote, Dulux exterior, special blower coil.

Midwest's new display cases include the "MC" line in all-porcelain, double-duty, one- and two-shelf cases in 6, 8, 10, and 12 ft. lengths, and single-duty cases in 10 and 12 ft. lengths. Construction features include 4 inches of insulation, self-defrosting high humidity coils, non-glare lighting, and American Hard Rubber doors.

The "DC" all-porcelain line will have substantially the same features as the "MC" line, with the exception of three shelves instead of two. This series is available in 6, 8, and 10 ft. lengths.

Air Conditioning Units 'On Top' of Aviation Plant in Dallas

DALLAS, Tex.—The huge new plant being built here by North American Aviation Co. will be the largest air conditioned building in the world.

Covering an area of approximately 10 city blocks, this plant will be windowless and artificially lighted throughout. It also will be virtually bombproof. To camouflage the factory, the roof will be covered with gravel-gray coloring which will blend with the ground of the area.

The building will be only 21 feet high. Its 3-inch-thick walls will be composed of one layer of concrete and two of steel. This construction was used so that the walls would bend to a considerable degree before actually breaking under the strain of a bombing attack. Air conditioning equipment will be housed in "penthouses" on the roof.

Old French Market Is Sold on Refrigeration; Saves Big Banana Loss

NEW ORLEANS—Demonstrating the fact that it's never too late to teach an old market new methods is the commercial refrigeration installation recently made for Monteleone Brothers, banana and vegetable wholesalers in New Orleans' famous old French Market place, by M. T. Wetherbee, commercial division manager of Wand's, Frigidaire dealer.

Investigating the refrigeration sales possibilities in the 100-year-old banana traffic, a mainstay of New Orleans market income, Mr. Wetherbee discovered that the Monteleone establishment was still sticking to traditional handling methods—and losing close to \$300 a month by doing it.

This establishment was storing both bananas and perishable vegetables in a 24 x 24 room, with no cooling except for shelving around the sides on which blocks of ice were set each morning. Delicate banana shipments which required preservation were sent to a cold storage house, at an average cost to the firm of \$150 a month. The storage room had no insulation of any kind—representing a heat and profit leak of notable proportions.

In selling refrigeration to Monteleone Brothers, Mr. Wetherbee pointed out that bananas are now refrigerated all the way from tree to grocery store, instead of the centuries-old method of ripening in transit. Also emphasized were spoilage costs, and inability to maintain profitable reserve through the season. The cooling system installed as a result of this was completed in July, and has already paid half its cost.

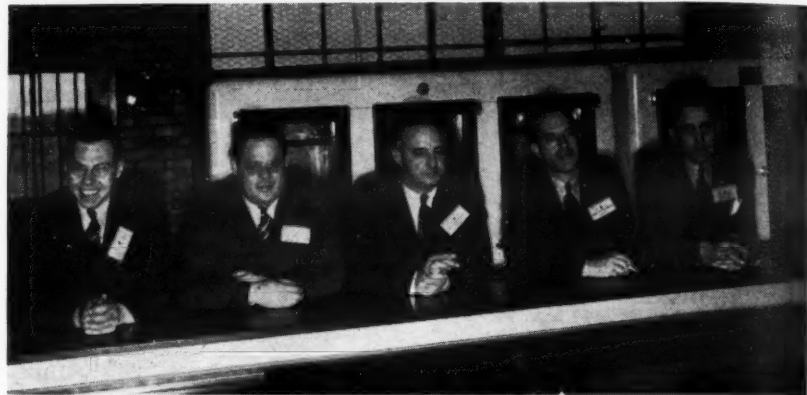
Included in the Wand installation are two insulated rooms, measuring 12 x 24 feet each, and formed by a heavy partition through the middle of the former stock room. An entire carload of bananas can be accommodated. Two temperatures are maintained, the vegetable room operating at 40° F. with one 3-hp. compressor hooked to three Frigidaire four-stair evaporative coils.

A separate plant, to maintain humidity, is in the banana room—this a 2-hp. compressor with one evaporative coil on the ceiling. Temperature here is 60°, both operating on low-pressure cut-outs. They can operate independently, and are intermittently active. Total cost was \$2,600, and the job was installed in three weeks. Since that time the Monteleone Brothers firm has been able to maintain banana stocks for reserve orders, and has not lost a dollar through spoilage.

Tyler Men Get Set For 1941



President Jerry Tyler and a group of distributors get together in a discussion of 1941 sales features and policies during the annual convention of Tyler Fixture Corp., at which a new direct-draw draft beer dispenser was introduced.



In this line-up of "all-star" Tyler distributors are Willis Stafford, Aurora, Ill.; Art Wolff, Elgin, Ill.; Grant and Art Fenstermacher, Detroit; and H. C. Wilbur, Akron, Ohio.

Detroit Awards Made In Direct-Draw Beer Cooler Delco-Heat Contest Tops '41 Tyler Line

DETROIT—Winners of territorial awards in the "Lucky 11" sales contest recently concluded by the Delco-Heat organization in Michigan and northern Ohio were:

Harry Ainsworth, McCarthy Sales & Service Co., Lansing; W. R. Rayment, Dynamic Heating Co., Detroit; Lorenz Kisor, DeLano & Kisor, Ypsilanti; P. H. McCurdy, McCurdy Plumbing & Heating Co., Lapeer; H. H. Newitt, the Newitt Co., Flint; W. Kelly, the Newitt Co.; Jesse LaDue, Heat & Kold Co., Saginaw; Russell Halliday, Wurzburg Dry Goods Co., Grand Rapids; F. A. George, F. A. George Co., Toledo; Noel Goddeyne, Goddeyne Plumbing & Heating Co., Bay City; G. W. Rynbrand, Glen W. Rynbrand Co., Kalamazoo.

NILES, Mich.—Tyler Fixture Corp.'s 1941 lineup of commercial refrigeration products, including a new direct-draw draft beer dispenser and a redesigned line of fruit and vegetable refrigerators, was previewed by 150 distributors of the company at the annual convention here Nov. 15 and 16.

New features in the 1941 Tyler line of food store equipment include triple-glass sliding doors as standard in all cases, heavy-duty chrome plated hardware in double-duty cases, delicatessen cases, reach-in boxes, walk-in coolers, and other models, and added refinements in the Tyler "Dry Kold" bottle cooler, including hard rubber sliding doors, and a wider bar top.

In addition to previewing 1941 Tyler products, distributors also heard discussions of successful methods used in merchandising display case, walk-in coolers, beverage coolers, complete market installations, reach-in boxes, and refrigerated produce equipment by members of the Tyler organization from various sections of the country. Demonstration of the erection of a sectional walk-in cooler was another feature of the meeting.

The convention closed officially at noon on Nov. 16, and distributors were guests of the company at the Notre Dame-Iowa football game.

'Cap and Skillet' Club

STAUNTON, Va.—Hub Furniture Co., Frigidaire dealer here, has organized a "Cap and Skillet Club" among its salesmen in an effort to boost electric range sales.

Forged Brass Manifolds

Furnished either with Packed or Packless Type Valves in 2 and 3 unit pieces.

Our Forged Brass Manifold Bars are machined 1½" O.D. and are tapped with ½" I.P.S., so that either threaded adapters or standard 1½" O.D. solder fittings may be used in making connections.

A complete line on display at our booths Nos. 120 and 121, at the All-Industry Refrigeration and Air Conditioning Exhibition, Stevens Hotel, Chicago, Jan. 13-16, 1941.

MUELLER BRASS CO.
Port Huron, Michigan

To you men who read the News
'over somebody else's shoulder'

Why not receive your own personal copy of the News every week, right on the dot...? Why wait for the boss to read it and perhaps a half dozen others? Are many articles "clipped" by the time you see it? Why sacrifice your enjoyment and satisfaction by not having the News always within reach? Why let it be necessary to pass it on to the next fellow—reluctantly?

If you want to give yourself the FULLEST MEASURE of all the News offers you, order your personal subscription at once.

Individual rates: \$4.00 per year
\$7.00 for 2 years.

Group rates:

5 to 9 subscriptions \$3.75 per year
10 to 19 subscriptions \$3.50 per year
20 to 49 subscriptions \$3.25 per year

MAKE BIGGER PROFITS
ON F. H. P. INSTALLATIONS
with **Gilmer BELTS**

On all types of f.h.p. installations, you'll find Gilmer V-Belts the profitable line to handle.

Gilmer V-Belts are made by belt specialists, on the largest assortment of V-moulds in the world.

Gilmer F. H. P. V-Belts fit 6800 models, 153 makes of electric refrigerators; also oil burners, stokers, air conditioners, beer pumps, water pumps, compressors and many other belt-driven appliances.

Near you is a Gilmer jobber who has a complete size range of V-Belts available for prompt delivery.

Write today for your FREE copy of the Gilmer catalog, "America's Belt Bible"; also information on how to make bigger profits with the Gilmer "Eye-Fit" Tower Belt Assortment. Visit our booth, No. 109, at the Show.

L. H. GILMER COMPANY
TACONY, PHILADELPHIA

Philadelphia Air Conditioning Dealers Approve Cooperative Promotion Plan Aimed at 4,000 Select Prospects Also Seek To Amend Ordinance Requiring Stationary Engineers To Exempt Freon

By Henry Knowlton

PHILADELPHIA — Cooperative promotion of air conditioning sales during the coming year, a uniform method of reporting air conditioning sales, and a discussion of a new local ordinance requiring licensed engineers on all refrigeration and air conditioning systems over 25 tons occupied the members of the Air Conditioning Division of the Philadelphia Electric Association at the first fall meeting here last week.

The association also gave consideration to the matter of group or individual membership in the National Air Conditioning Association, but the matter was tabled pending the receipt of more information concerning the objectives of the national body. Henry Knowlton of AIR CONDITIONING & REFRIGERATION NEWS spoke briefly concerning present day trends in the air conditioning industry.

Henry McCullough of S. S. Fretz, Jr., local G-E air conditioning distributor, is chairman of the Philadelphia group this year and presided at the meeting. Sheridan Taylor, of the Electric Association and secretary of the Air Conditioning Division, reported a successful golf outing held during the summer.

TO GO OUT EARLY

On the recommendation of a committee comprised of J. Call, C. R. Lyle, H. H. Mather, and J. A. Connelly, chairman, the association approved a cooperative direct-mail advertising campaign, the details of which will be worked out at a later date. Under the plan, some 4,000 prospects for air conditioning equipment will receive a series of mailing pieces during the early spring.

Discussion of the promotion brought out the desirability of having the mailings go out early, well before hot weather.

Mailing campaigns of this type have gone out in the Philadelphia area in former years, but the present idea of the association is to study ways and means of making the campaign more effective.

MARKET NOT SPLIT

In its study of the situation the committee reported that "We have recognized the desirability of developing the market for package equipment but do not believe it practical to segregate the market for mailing purposes into prospects for package merchandise and for central systems. Under these conditions the advertising material must be broad in scope, stressing air conditioning and be

suitable for both large and small prospects."

The committee also emphasized that all prospects must receive a follow-up call if the campaign is to have maximum effect. Results obtained from the mailing campaign will be made available to all distributors.

The legal committee of the association, of which Charles Phelps, of Pierce-Phelps, Inc., Airtemp distributor, is chairman, reported that under a recent ordinance passed by the City Council it is necessary to have licensed operating engineers on all refrigeration and air conditioning systems over 25 tons in capacity. The committee is endeavoring to get an amendment passed which is to make an exception of "systems using 'Freon-12' as a refrigerant."

ORDINANCE CHANGE

The ordinance provides that, "It shall be unlawful for any person or persons to operate or have charge of any generating pressure vessels used in connection with cleaning and treating garments of textiles, steam boiler, steam engine, or refrigeration machinery in the City of Philadelphia unless such person is 21 years of age and has received a certificate authorizing him to have charge of or operate the same. . .

"Provided that this ordinance shall not apply to internal combustion engines, nor to such generating pressure vessels, boilers, engines, or machinery in dwelling houses used exclusively for residential purposes or to such generating pressure vessels, boilers, engines, or machinery as may be under the supervision or control of the Federal authorities, nor to the operation of any generating pressure vessel carrying not more than 15 lbs. pressure, or the operation of refrigeration machinery with a capacity of 25 tons or less. Licensed engineers may act as firemen of any steam boiler in Philadelphia."

In considering the method of reporting the sale of air conditioning systems to the association for the purposes of record it was decided to report the sales in three classes, room coolers, air conditioning installations, and industrial air conditioning installations. All reports show the totals sold for the previous month, together with the cumulative total for the year to date. Names and addresses of owners will not be listed in the room cooler classifications, but will be reported in the two other classifications.

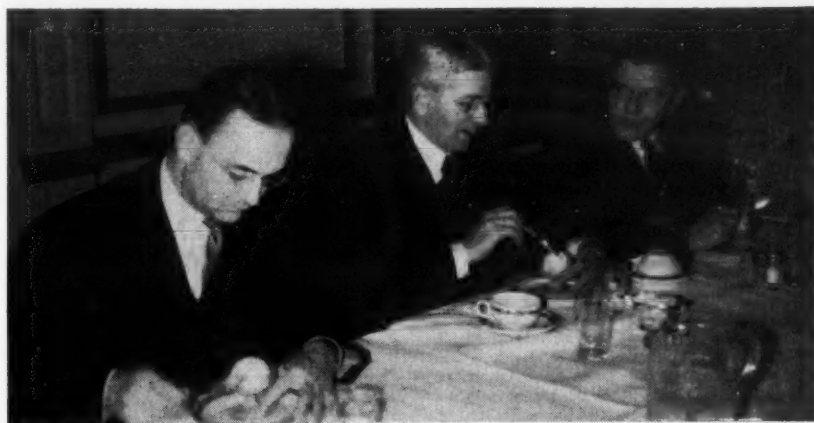
When the material is assembled each member of the association is advised of the total amount of business done by the group for the month so he may check the sales of his firm against the total. Names and addresses of individual installations are not made public under the association set-up.

The committee recommending this method of reporting, which was found acceptable by the organization, was made up of C. M. Phelps, H. H. Mather, and F. J. Heath.

At the close of the meeting Mr. McCullough introduced Henry Knowlton of AIR CONDITIONING & REFRIGERATION NEWS, who cited developments in the conditioning of windowless factory buildings, the tendency of large industrial concerns to purchase cooling equipment for employee health and comfort in many departments, and the increase in the sale of "packaged" equipment as significant trends in the progress of the industry.

Present at the meeting were Henry McCullough, S. S. Fretz, Jr.; Sheridan Taylor, Electrical Association of Philadelphia; Shel Myers, Westinghouse Electric & Mfg. Co.; H. H. Mather, Philadelphia Electric Co.; Fred Pocock, J. J. Pocock, Inc.; John A. Connelly, John A. Connelly Co.; James Anderson and George Tuckerman, Anderson Conditioning Corp.; Joseph Call, Elliott-Lewis Co.; C. R. Lyle and George C. MacFarland, McShain-Carrier Co.; Duncan Cox, Carrier Corp.; A. Christensen, York Ice Machinery Co.; Wm. S. Hodgekinson, Philadelphia Electric Co.; Frank Heath, Philco; Theodore Rolland, Elliott-Lewis Co.; and Charles M. Phelps, of Pierce-Phelps, Inc.

Philadelphia Air Conditioning Association Meets



Dinner didn't interfere too much with the discussion, this picture indicates. Left to right: George C. MacFarland, McShain-Carrier; C. R. Lyle, McShain-Carrier; and Joseph Call, Elliott-Lewis Co.



Serious business on tap here. Left to right: H. H. Mather, Philadelphia Electric Co.; A. Christensen, York Ice Machinery Corp.; Theo. Rolland, Elliott-Lewis Co.

At right: 250 horsepower Century Squirrel Cage Motor driving a pump.

Century TYPE SCX MOTORS
Provide 35% Lower Starting Current

FOR Centrifugal Pumps Air Conditioning Fans and Blowers

It will pay you to investigate the advantages of Century Type SCX Squirrel Cage Induction Motors for applications where very low starting current is an essential requirement.

This type of Century Motor will help solve such problems as voltage fluctuations caused by the shock of heavy motor starting current—limited starter and transformer capacity—and in many applications results in a saving on expensive motor control accessories.

As an example, one Century customer using three 250 horsepower Type SCX Motors, driving large pumps, has limited his starting current to 2400 amperes per motor on a 208 volt net work line. 220 volt motors would require only 2270 amperes. Here is definite proof of the ability of Century Type SCX Motors to keep starting current low.

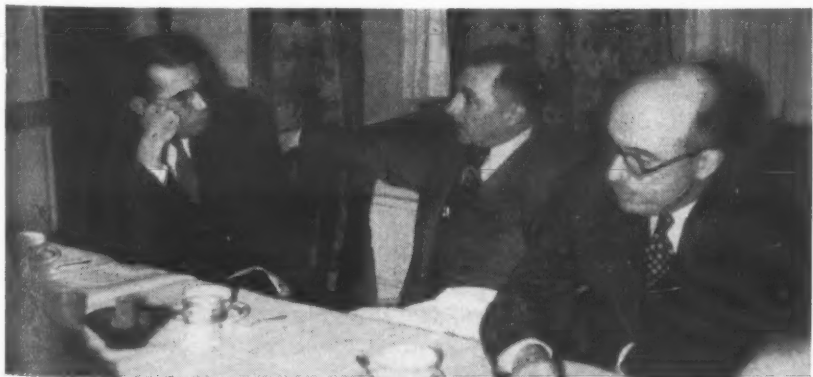
Century manufactures a wide variety of motor types, from fractional to 600 horsepower, all of which are equally effective in solving the numerous problems of industrial, commercial and domestic motor drives.

For many years, Century has specialized in the problems of refrigeration and air conditioning motorization. As a result, Century has developed specialized motors which have met the exacting requirements of thousands of installations in your industry. For complete information call in your nearest Century Motor Specialist—his advice is valuable and always at your service.

CENTURY ELECTRIC COMPANY
1806 Pine Street St. Louis, Missouri
Offices and Stock Points in Principal Cities



One of the Largest Exclusive Motor Manufacturers in the World



Left to right: Duncan Cox, Carrier Corp.; Sheridan Taylor, secretary, Air Conditioning Division of Philadelphia Electric Association; Henry G. McCullough, S. S. Fretz, Jr. Co., association chairman.



Story-telling time. Left to right: Shel Myers, Westinghouse; John A. Connelly, Westinghouse air conditioning distributor; Fred Pocock, J. J. Pocock, Inc., Frigidaire distributor.

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F. M. COCKRELL, Founder

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Retailer's Part In National Defense

READERS of AIR CONDITIONING & REFRIGERATION NEWS, the big majority of whom are retailers, are undoubtedly as patriotic a group of citizens as you can find anywhere in these grand and glorious United States of America.

They, too, are anxious to do their bit. They can't enter into the manufacture of planes and guns and tanks and smokeless powder, to be sure, but in today's conception of war, "total defense" involves the entire civilian population.

"So what can we do to help this country prepare for any eventuality?" some of them have asked.

Southeastern Business Men Talk It Over

Recently business men from nine southeastern states, meeting in conferences held under the auspices of the National Chamber of Commerce and its member organizations, considered in its various aspects the place of American business in the national defense effort.

Several hundred representative business men attended the two conferences, one at Birmingham, Ala., and the other at Roanoke, Va. Officers, directors, and members of the Chamber headquarters staff participated in the forum sessions at which discussion centered upon manufacture, distribution, and taxation and finance in relation to defense.

How Defense Commission Figures It Out

The part that the retailer plays in national defense was described by J. Hudson Hufford of Bluefield, Va., member of the Retailers Advisory Committee of the National Defense Advisory Commission, who spoke at both meetings. He said:

"Each decade finds the retailer in a more vital position with respect to serving people. The

industry has become the lifeline of the people. A break in that line, if not quickly repaired, would destroy civilian morale in a matter of days. This is clearly understood by those who plan our defense, and it must be seen with equal clarity by the smallest retail unit in our republic.

Patriotism & Good Business Meet on Common Ground

"The retailer must realize that the people must have confidence in his ability to maintain the line of supply. They must have more confidence than that. They must believe in his devotion to the national defense cause, in his adherence to a long standing policy of service at reasonable profit. They must believe in his integrity. We must not fail them in any particular.

How Retailers' Advisory Committee Will Serve

"The Retailers' Advisory Committee, for the present, will serve in the following way:

"(1) We will report prices at the pre-retail level in an effort to find and head off unjust increases.

"(2) We will discourage the use of improper advertising such as that involved when 'scare' are attempted in an effort to get people to 'buy now.'

"(3) We will discourage speculative buying both by retailers and the public because such buying always starts an upward spiral of prices that result in misery to the consumers who do not do it and losses to those who do it.

"(4) We will tell the people through advertising and sales forces of every change in quality of goods when qualities are out of substitutions made.

"(5) We will help the government tell the people about instances of wise buying done, by retailers and government buyers, in such a way that our productive and distribution systems are not disrupted."

Retail Sales Will Follow Rising Curve

Thus the outline is ready for retailers, and individuals who read this can adapt their own programs accordingly.

It seems altogether likely that as soon as the new plants are completed, the much-needed machine tools installed, and the designing and planning done, hundreds of thousands of workers will be answering the morning factory whistles, workers who haven't swung a dinner pail (except on a WPA job) in quite awhile.

Having Adequate Stocks Will Help Serve Nation

These men will work full time. They will earn good wages. And they will be wanting to buy things—things they have wanted for the last 10 years, and have been unable to purchase.

It's up to retailers to be ready for them, to have adequate stocks of goods, to offer them the financing necessary for time payments. Household refrigeration, commercial refrigeration, air conditioning (for factories, shops, homes, and apartments) should all rate a tremendous demand in 1941 and 1942.

The retailer whose watchword

They'll Do It Every Time . . . By Jimmy Hatlo



is SERVICE should do very well and, at the same time, help maintain high civilian morale through efficient distribution of the products which help make America's standard of living the highest to be found anywhere in the world.

Commercial Refrigeration Looks Ahead

EVIDENCE of a boom in commercial refrigeration during 1941 is at hand, although not all of the hand is showing just now because some of the more prominent players are "keeping 'em close to the chest."

Several manufacturers are making big plans. Others are making counter-plans. All of which will be very interesting from the dealer's standpoint, because every plan embodies a desire to step up the dealer's sales.

Known Markets Fairly Well Saturated

Those that have good dealers enfranchised are going to strive to keep them; those who want some of these good dealers are setting their lures with tempting bait.

Most known markets for commercial refrigeration equipment are by now so well saturated that new equipment sales consist largely of replacement business. Considerable thought and effort, however, are being placed behind attempts to locate and develop new markets.

Economy of Operation Used To Be Big Sales Point

Big reason for all the behind-the-scenes activity now going on in commercial refrigeration (the news of which will be reported first in AIR CONDITIONING & REFRIGERATION NEWS when it breaks) is the fact that market studies have convinced manufacturers that 1941 should be a banner year for commercial refrigeration. And they're all out to get their fair share.

In the halcyon days of manufacturer-distributor-dealer operations, salesmen who specialized in compressors and coils did a land-office business with food retailers and servers by demonstrating the economy of mechanical refrigeration as compared with ice.

Now that mechanical refrigeration is so prevalent, however, the story is different. Today new commercial refrigeration equipment is sold on appearance, on its aid in merchandising. Supplanting the original sales theme of economy, modernization is the big selling point with today's more successful dealers and salesmen.

Best Salesmen Know Food Retailing Business

And so it is that the men who are moving the most commercial refrigeration into the stores of food retailers today are men who know the food retailing business.

These salesmen can slice meat, wait on customers, arrange displays, draw up new store layouts, write advertising. Their story is more customers plus more sales per customer through gleaming new equipment, rather than decreased operating costs—although these can be demonstrated also, if need be.

Positive Approach Is Most Effective Nowadays

In brief, it is a positive, rather than a negative, line of reasoning that is making the most productive sales approach in commercial refrigeration today.

Successful independent dealers in the commercial refrigeration field nowadays are ready to sell the complete unit, or any of its component parts.

Passing the Buck Common When Sale Is Divided

They have found that the purchaser holds the machine dealer responsible for the functioning of the case, and the case dealer responsible for the functioning of the machine.

In the past, there has been considerable buck passing on this

score among dealers who have divided the business. The current trend is toward joint dealerships, whereby one firm handles everything that goes into an installation.

When assuming the responsibilities of all the franchises which are needed to supply complete installations, dealers have found that they do not need to be technical experts either on machine design and service, or on case design and service. That wouldn't have been true a few years ago, but the dependability of both classifications of products has improved measurably in recent times.

Commercial Refrigeration Has Shown Real Progress

Case manufacturing has shown especially commendable progress in the last few years, and even further improvements are in the offing. The range of commercial case lines has also been widened, and new markets promoted.

Nor have the refrigerating machine manufacturers lagged in the promulgating of better design. The development of trouble-free gaskets (fashioned from synthetic rubber) is just one example of service-eliminating design features of some of the new machines.

Development of Hermetics Holds Promise

Further development of hermetic machines for the "package unit" in commercial refrigeration equipment is another advance that will likely make life much simpler for many dealers in the future.

Efforts of the Commercial Refrigerator Manufacturers Association, under the astute leadership of Paul Sullivan, to foster sound business practices—particularly as to installment terms—have been signally successful. Further co-operation to eliminate trade evils is promised.

All in all, the commercial refrigeration dealer seems to be sitting pretty for 1941. His lot won't be so pretty, however, if he just sits. Business still belongs to the man who goes after it.

Robinson Keeps His Profits Up By Unusual Efforts To Keep His Overhead Down

Rents Part of Store To Traffic-Getting Enterprises, And Pays For Service Work By the Piece

By Henry Knowlton

COLUMBUS, Ohio—An appliance dealer must "hit the line" along with his salesmen—and turn in a respectable volume of personal business to be successful under present day conditions in the opinion of C. C. (Chuck) Robinson, owner of C. C. Robinson Co., General Electric dealer here. While Mr. Robinson has four veteran salesmen, whom he considers "the best in this part of the country," he takes his turn on the display floor every day and personally closes a fair percentage of the firm's business.

Associated with Mr. Robinson are O. O. King, who has been a member of the organization for seven years; M. E. Van Atta, who has, in the past, sold appliances for Akron department stores and for Sears, Roebuck & Co.; O. J. Gibbons, formerly connected with the Railway & Light Co. (utility) of Columbus, and R. S. Henry, who joined the Robinson Co. in 1932. Mr. King and Mr. Van Atta are "regulars" in the roster of G-E "Toppers," and all four men average well over \$250 per month throughout the year.

'Luxury' Sales Again



C. C. "Chuck" Robinson likes to sell this double-door deluxe refrigerator. He says sales of such large refrigerators have been good this year, with a returning "luxury" market.

Mr. Robinson's formula for operating a dealership appears simple, but it has taken a number of years to reach its present point of development. It is—keep the overhead down—way down, and the individual sales up.

To keep the overhead down, Mr. Robinson has only two members of his firm on salary—the bookkeeper and cashier. To help absorb the absolute essentials—rent, light, and heat, Mr. Robinson operates a premium department for the Octagon Soap Co. People saving premiums on Octagon soap must cash them at the Robinson store, which is located near the center of downtown Columbus. This operation not only helps pay the rent, but it brings in approximately 4,000 people every year from within a wide radius of Columbus. People come in to cash soap coupons—they become interested in a refrigerator or electric range—they buy.

CURIOUS FLOCK IN

Mr. Robinson also rents space in his store to the Audichron Co. which operates an automatic machine used for telling the time of day to telephone subscribers. Approximately 25,000 calls are taken every 24 hours by this machine, and Mr. Robinson

reports that many people come in to watch it operate, just out of curiosity.

Once again—this device helps pay the rent, and it also increases store traffic. The Robinson formula keeps the overhead down and provides plenty of prospects for members of the organization to work on—and sell.

The Robinson service department is run without the usual overhead. All service is in charge of Jack Wendell, who keeps three full time service men busy, but operates the department as an independent business.

Mr. Robinson finances the service department only to the extent of buying the necessary parts from the local refrigeration supply jobber. The parts are billed to the service department out of stock, as they are used.

NOT HOURLY PAY

The department is operated on a "contract" basis, rather than on an hourly pay basis. Work includes service on appliances during the warranty period of one year, and after this time service is taken over by the local G-E distributor. The service department also operates an extensive re-conditioning shop, where all units taken in trade are put in shape for re-sale.

This operation includes a complete mechanical overhaul of all boxes, and the company maintains a refinishing room where second hand units are sprayed with Duco. All refrigerators in bad shape are junked, but Mr. Robinson reports a brisk business in "rebuilt trade-ins" which sell from \$29.50 to \$69.50.

Mr. Robinson reports that about 30% of the refrigerator deals made involve trade-ins and the percentage is growing. He has found that used refrigerators can be turned over at a good profit, after they have been completely re-conditioned and put in shape.

THE COLUMBUS CODE

Dealers in Columbus who are members of the Electrical Dealers Association adhere to a uniform schedule of allowances on trade-ins, Mr. Robinson reports. Under a "gentlemen's agreement" the better appliance dealers of the city have solved the allowance problem with a uniform schedule.

Floor Selling Important



Part of the store is rented to a soap company, and another part to a telephone-time telling system, so there is plenty of store traffic and store selling. Here O. O. King shows Josephine Grimm the fine points of a G-E refrigerator.

Re-Building For Profit



In the service shop, operated on a "contract" basis, many trade-ins are re-built and re-finished.

No allowance is made on deals which involve the sale of the \$112.50 model. An allowance of \$10 is made on a remote system taken in trade on the \$139.50 box. On refrigerators over \$150 an allowance of \$15 is made; on merchandise from \$150 to \$200 the trade-in is \$20, and on sales running from \$200 to \$400 the association members will go up to \$25 for a trade-in. The maximum amount allowed on a trade is \$50 on deals running \$500 and up.

Mr. Robinson states that the operation of this schedule has been very satisfactory in Columbus and that the association set-up has made it possible for the dealers to make money. No distributors are members of the association, and there is no "shopping" and "policing" of dealers. When one is found chiseling on list prices or trade-ins the matter

is simply called to the attention of the distributor involved.

"The result has been that dealers who are not members of the association have taken all the 'bad' deals where there is no profit," Mr. Robinson said, "and the result of this is that the chiseling dealers are soon out of business. We (association members) take only deals where there is a normal profit, which means that the profitless deals go to the marginal dealers."

"Where a customer is chiseling for a big discount, or trade-in we urge him to go back to the dealer who offered him a discount and try to get a bigger one. At the same time we try to sell our merchandise at the list price."

"If the customer finally buys from a price cutting dealer, we have helped him drive a hard bargain, and after a few of these the dealer is out of business," Mr. Robinson said.

The policy of the C. C. Robinson Co. is to keep the overhead down, the sales of all members of the organization up, and to sell all appliances at "just one price"—which spells profit at the end of the year.

Dr. Allison of MKB Talks To La Crosse Dealers

LA CROSSE, Wis.—Dr. G. W. Allison, New York, field representative for Modern Kitchen Bureau, addressed a dinner meeting of some 75 dealers and sales people staged by the La Crosse Appliance Dealer's Association Nov. 18 here.

Richmond Dealers Join In Xmas Promotion


RICHMOND, Ind.—Several electrical appliance dealers here are cooperating in a Christmas advertising campaign with special window displays and a two-page weekly advertisement in a local newspaper. First advertisement of the series stresses the drive's theme, "Give Authentic Electrical Gifts."

Cooperating retailers include Municipal Light & Power Plant of Richmond, Montgomery-Ward, Holt-house Electrical Shop, Minor Electric Sales, Pearson's, Romey's, the Davis Co., Luken's, Rinehart Sales, and Dunning Furniture Co. Holiday sales here are expected to be especially good in view of increased industrial production throughout this area.


Herman Goldberg Plans Annual Christmas Party

CHICAGO—Continuing an annual custom of several year's standing, Herman Goldberg, Chicago manufacturers' agent, again will play Santa Claus to customers and friends throughout the industry at a Christmas Party, to be held on Dec. 11 in the north ballroom of the Stevens hotel.

A number of the leading Chicago night club acts have been secured to provide entertainment, and George Marshall and his orchestra will play for dancing. More than 700 persons attended last year's party.



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Symbol of a Great American



THIS IS THE SYMBOL OF UNIVERSAL COOLER CORP.
Who Follow the American Tradition


We believe that reason and virtue are essential to democratic living—not alone in personal life but also in commercial life. We believe that our way of doing business, based on the fundamental principle of gaining confidence through continual satisfaction, is the right way! In servicing the nation's foremost manufacturers of refrigerating equipment with condensing units we have proof that our policies are sound. Manufacturers are invited to write for complete information.

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The R. & H. Chemicals Dept.
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Chicago, Cleveland, Kansas City, Newark,
New York, Philadelphia, Pittsburgh, San Francisco

Both Get Increased Responsibilities



H. L. Andrews and Stuart M. Crocker exchange congratulations on increased responsibilities in the General Electric organization. Mr. Andrews has added to his duties the management of the commercial refrigeration and air conditioning department, a post relinquished by Mr. Crocker to assume general direction of all G-E commercial activities.

Brown To Direct Sales Of Oklahoma Utility

OKLAHOMA CITY, Okla.—Alfred A. Brown, for 20 years a member of the Oklahoma Gas & Electric Co. organization, has been named vice president in charge of sales, succeeding O. A. Jennings, who has retired. In his previous position as sales manager of the company, Mr. Brown organized a plan of dealer cooperation for the merchandising of electrical appliances which has received national recognition. He has been a member of the sales committee of Edison Electric Institute, and a frequent speaker on refrigerator merchandising programs at E.E.I. meetings.

Mr. Jennings, who was with General Electric Co. in Arkansas and Texas before joining O. G. & E. in 1919, had much to do with developing the use of electricity to the production of oil, particularly in Oklahoma's oil fields.

In other executive changes, Bernard M. Lester was named vice president and treasurer.

Deane Perham Joins Sales Staff of Vilter Mfg. Co.

CHICAGO—Deane E. Perham, formerly with the refrigeration division of the Chicago Master Steamfitters Association, has become associated with Vilter Mfg. Co., Milwaukee manufacturer of refrigeration equipment. He will make his headquarters at 230 W. Superior St. here.

Identified with the refrigeration industry for more than 25 years, Mr. Perham is active in the affairs of the American Society of Refrigerating Engineers, and is a charter member of the Institute of Food Technologists.

Nelson Stuart Joins CBS Staff In Detroit

DETROIT—J. Nelson Stuart, formerly director of advertising and sales promotion for Kelvinator division of Nash-Kelvinator Corp., has joined the Detroit staff of Columbia Broadcasting System.

Baltimore 9 Months Cooling Volume Given

BALTIMORE — Air conditioning installations made during the first nine months of this year and reported to the Consolidated Gas Electric Light Co. are about 40% off last year's total for a similar period, according to local distributors.

The absence of heavy tonnage installations is said to account for the reduction in total volume. The list may be classed as incomplete and may contain some installations prior to Jan. 1, 1940.

Distributor-Dealer

Doings

Union Electrical Supply Moves Boston Quarters

BOSTON—Union Electrical Supply Co., local appliance dealership, has moved from 92 High St. to new and larger quarters at 180 Federal St. The move was attributed to increased business.

The old store will continue to operate for a limited time, however, for the purpose of disposing of some merchandise which the company would "rather sell than move."

Union Electrical Supply Co. this year is celebrating its seventeenth anniversary. According to the estimate of Sam Kaufman, its president and treasurer, the company has served more than 500,000 customers with almost \$3,000,000 worth of merchandise since its inception in 1923.

'Rex Cole Week' Helps Set Record For Month

NEW YORK CITY—Aided by a special "Rex Cole Week" promotion, sales of General Electric appliances in the territory covered by the distributorship reached a new all-time high during September, reports E. Hamilton Campbell, advertising and sales promotion manager.

September sales were 6% higher than that month in 1937, 12% higher than 1938, and 16% ahead of 1939 marks, Mr. Campbell reports, and 39% of all the month's business was done during Rex Cole Week.

Roberts & Dawson Now Roberts Appliance Co.

HUNTINGTON PARK, Calif.—Firm name of Roberts & Dawson has been changed to Roberts Appliance Co. Alfred E. Roberts, owner, reports addition of a radio department to the lines of gas ranges, electric refrigerators, washers, and ironers. The store is located at 6114 Pacific Blvd.

A. R. Floyd Opens Fairmont, N. C. Store

FAIRMONT, N. C.—A. R. Floyd, who for three years was with Floyd Electric Co., is on his own as an electrical appliance dealer here now, handling the complete Frigidaire line, Zenith radios, and Meadows washers.

Gulfport Frigidaire Dealer Moves

GULFPORT, Miss.—Brinkley's, Inc., Frigidaire commercial refrigeration dealership here, has moved from its former location to 1413 25th Ave. A new 30 x 40 foot showroom for walk-in coolers, beverage coolers, and water cooling equipment is included in the new building.

Dietze Music Co. Named Lincoln Norge Dealer

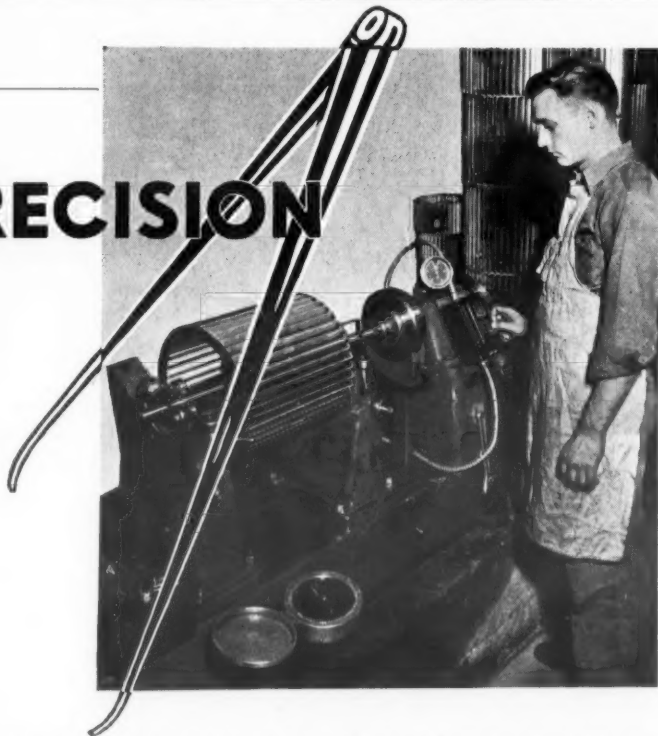
LINCOLN, Neb.—The Dietze Music House, which recently moved into new and larger quarters at 1208 "O" St., has been appointed Lincoln dealer for Norge refrigerators, gas and electric ranges, and washers. August H. Dietze is proprietor.

Air Conditioning Installations In Baltimore During 1940

(List Is Incomplete and May Contain Late 1939 Installations)

Customer	Make and Installed by	Size in Hp.
Lord Baltimore Hotel	(Westinghouse) L. E. Mitchell, Inc.	62
Doc's Cocktail Lounge	(Carrier) Air Conditioning, Inc.	3
Irvington Pharmacy	(York) Maryland Refrigeration Co.	5
George L. Schwab	(York) Maryland Refrigeration Co.	3
Griddle Shop	(York) Maryland Refrigeration Co.	5
Ruth's Beauty Salon	(Norge) Norge Engineering Corp.	2½
George A. Farley	(York) Maryland Refrigeration Co.	7½
Frank Cvach & Son	(York) Maryland Refrigeration Co.	6
McCormick & Co. Office	(Carrier) Air Conditioning, Inc.	32
Maryland Title & Trust	(Airtemp) H. E. Crook Co., Inc.	42
Tommy Tucker 5 & 10 Cent Store	(Frick) Paul J. Vincent Co.	40
Glen Theater	Owner	10
Wagner & Wagner	(Carrier) Air Conditioning, Inc.	8
Times Theater	(Carrier) Air Conditioning, Inc.	35
White Star Lunch	(Frick) R. H. Bozman & Bro.	11
Clayton Beauty Shop	(York) Maryland Refrigeration Co.	3
Home Friendly Insurance Co.	(Carrier) Air Conditioning, Inc.	74
Eaton Bowling Alley	(Frick) R. H. Bozman & Bro.	20
Echo Theater	(Frick) R. H. Bozman & Bro.	24
Mandel's Restaurant	(Frick) R. H. Bozman & Bro.	26
Cavalier Restaurant	(Frick) R. H. Bozman & Bro.	30
Sam's Beauty Salon	(Carrier) Air Conditioning, Inc.	3
Alco Gravue, Inc.	(Carrier) Air Conditioning, Inc.	10
H. Potts & Sons	(Carrier) Air Conditioning, Inc.	6
Preston Pharmacy	(Carrier) Air Conditioning, Inc.	3
Boston Novelty Co.	(Frick) Paul J. Vincent, Inc.	3½
Stewart & Co.	(York) York Ice Machinery Corp.	39½
Julius Gutman & Co.	(York) Maryland Refrigeration Co.	47½
Rex Theater	(Carrier) Air Conditioning, Inc.	50
Nemo Theater	(Carrier) Air Conditioning, Inc.	19
Bethlehem Steel Co.	(Airtemp) H. E. Crook & Co., Inc.	265
Boulevard Restaurant	(Frick) R. H. Bozman & Bro.	9½
Westport Theater	(Frick) Paul J. Vincent Co.	35
Alpha Theater	(Frick) Paul J. Vincent Co.	35
Highland Theater	(Frick) Paul J. Vincent Co.	35
Warner-Freuhof Co.	(Westinghouse) L. E. Mitchell, Inc.	12
Wagner & Wagner	(Frick) R. H. Bozman & Bro.	11
Southern Hotel	(Carrier) Air Conditioning, Inc.	33
White Coffee Pot	(Frick) R. H. Bozman & Bro.	13
Globus Cafeteria	(Westinghouse) L. E. Mitchell, Inc.	12
The May Co.	(G-E) Automatic Heating & Cool.	3
New Highland Bowling	(Frick) Paul J. Vincent Co.	38
Maryland Lunch	(Frigidaire) Carey Sales & Serv.	9
Central Insurance Co.	(York) York Ice Machinery Corp.	77½
Mitchell Fur Co.	(York) Maryland Refrigeration Co.	5½
Doc's	(Carrier) Air Conditioning, Inc.	22
Mt. Royal Novelty	(Carrier) Air Conditioning, Inc.	5½
Lapidis Delicatessen	(Frick) R. H. Bozman & Bro.	9½
Green Dress Shop	(Frick) Paul J. Vincent Co.	11½
Shure's Drug Store	(Carrier) Air Conditioning, Inc.	5½
Earl Club	(Carrier) Air Conditioning, Inc.	18
Glazer's Confectionery	(Carrier) Air Conditioning, Inc.	3½
Bethlehem Steel Co.	(Frick) Paul J. Vincent, Inc.	91½
Hooper's Restaurant	(Carrier) Air Conditioning, Inc.	3
Dundalk Bowling Alleys	(Frick) R. H. Bozman & Bro.	36
Theodore Reichart	(Carbondale) Union Service Co.	11
Ivy's Restaurant	(Curtis) Industrial Engineering Co.	9
Cloverdale Spring Co.	(Carrier) Air Conditioning, Inc.	3
Lilly & Zeiler	(Carrier) Air Conditioning, Inc.	6
Adler's Dress Shop	(Frick) R. H. Bozman & Bro.	9
Thomas & Thompson	(G-E) Automatic Heating & Cool.	8
Charles St. Pharmacy	(G-E) Automatic Heating & Cool.	3
Cy's Delicatessen	(Curtis) Industrial Engineering Co.	6
Zentz Pharmacy	(G-E) Automatic Heating & Cool.	5½
Austin Pharmacy	(G-E) Automatic Heating & Cool.	3
Austin Pharmacy	(G-E) Automatic Heating & Cool.	6
Lewis Pharmacy	(Carrier) Air Conditioning, Inc.	5½
Boulevard Restaurant	(Carrier) Air Conditioning, Inc.	6
Lee Gaim You	(Carrier) Air Conditioning, Inc.	3
First National Bank	(G-E) Automatic Heating & Cool.	4
J. Henry Hooper Agency	(Frick) Paul J. Vincent Co.	5½
Larry's Barber Shop	(Frick) R. H. Bozman & Bro.	6
Sonia's Dress Shop	(G-E) Automatic Heating & Cool.	3
Federal Tin Co.	(Carrier) Carrier Corp.	30
Hot Shoppe	Owner	30
Ann Lewis	(York) Maryland Refrigeration Co.	7½
Stanwycks	(Carrier) Air Conditioning, Inc.	3
Parker Metal Co.	(York) Maryland Refrigeration Co.	3
Riall-Jackson Co.	(Westinghouse) L. E. Mitchell, Inc.	8
C. W. Long	(Carrier) Air Conditioning, Inc.	3
Essex Pharmacy	(Carrier) Air Conditioning, Inc.	5½
Leed's Pharmacy	(York) Maryland Refrigeration Co.	3½
Bickford's Inc.	(York) Maryland Refrigeration Co.	11½
Riggs, Distler & Stringer	Owner	18
Lambros Pharmacy	(York) Maryland Refrigeration Co.	3½
Citizen's Barber Shop	(Westinghouse) L. E. Mitchell, Inc.	4½
Maryland Hotel	(Frick) Paul J. Vincent Co.	11
Jim's Restaurant	(G-E) General Electric Supply Co.	5½

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"YES SIR... IT'S A SUPERIOR ECONOMIZER!"

It will increase the overall capacity, and reduce the running time of your commercial job AS MUCH AS 20%.

ECONOMIZERS prevent sweating and frosting of suction lines—save compressor repairs caused by oil slugging—provide for active use of 100% of evaporator surface and bring "on-the-line" jobs within the normal cycle range.

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"Beauty is only skin deep" . . . but under the lustrous silver surface of these sensational new Servel units, you'll find a degree of performance, economy and noiselessness never before available in low-pressure refrigeration. Write today for details. Servel, Inc., Electric Refrigeration and Conditioning Div., Evansville, Ind.

Equipment For a Rebuilding Plant

1. Control Tester

Editor's Note: This description of a control tester is the first of a series of articles to be published in AIR CONDITIONING & REFRIGERATION NEWS on the special equipment used by Associated Refrigerator Plant, Inc. in its re-building of household refrigerator units. These articles will describe equipment that any service man can make in his own shop.

By Edward M. Siegel, Associated Refrigerator Plant, Inc., Philadelphia

The picture and drawing show our control tester. It was made from the frame of an old standard model Frigidaire, trimmed along the edges to the size we wanted, and cut out on the sides and back to make the installation and servicing of the high side simple.

The sketch of the refrigerant system shows a simple expansion valve system, in which we have used a Kelvinator twin-cylinder pump, a small Mayson expansion valve, and a boiling bowl which we made ourselves out of some copper tubing wound inside of a hollow shell about 4 inches in diameter.

LIQUID COOLER

The system is essentially nothing more or less than a liquid cooler, the liquid being carbon tetrachloride. The cover of the bowl has four holes in it, all evenly spaced from the coils around the edge of the bowl.

In one of these holes is the bulb for the direct reading thermometer, which can be seen at the right of the tester. In the other three holes go the bulbs of the controls to be tested, and the multiple leads on the left rear of the tester connect the electrical contacts in the control into the indicating circuit of the tester.

When the contacts close, the bulb in the center of the tester lights, and when the contacts open, the bulb goes out.

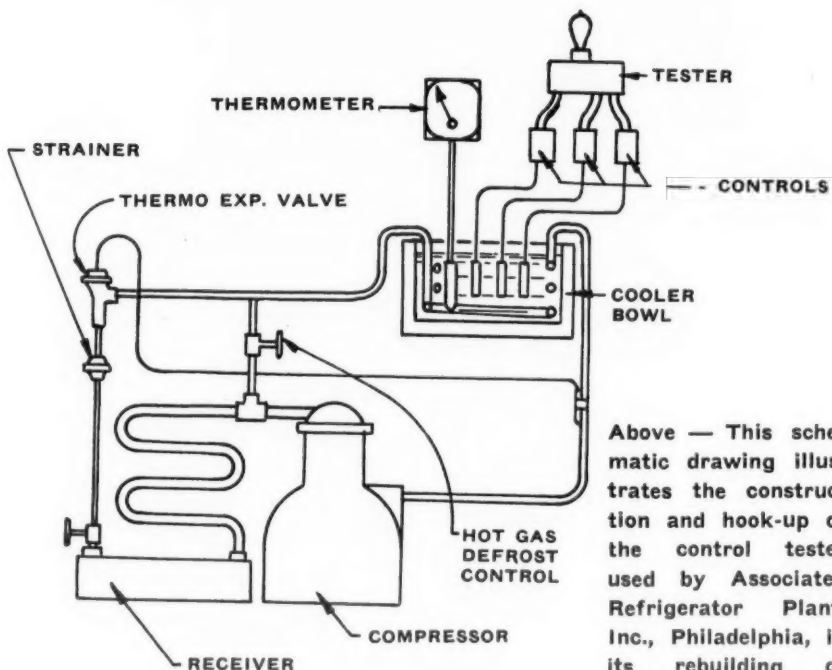
In order to speed up the process of cycling the control, a hot gas defrosting system is used. When the liquid has pulled down enough to cause the control to operate, the valve in the left foreground is opened with a ratchet wrench, and the hot gas from the head of the compressor is flooded right through the cooling coils, warming the bowl very rapidly. Thus the temperature of the liquid in the bowl may be raised or lowered very rapidly.

OPERATION OF LIGHT

The electric light indicates cut-on and cut-off of the control, and the large dial Marsh thermometer indicates directly the temperatures in the bowl when these operations take place. The control may thus be adjusted very rapidly to get it to cut on and off at the correct temperature.

Incidentally, I might point out that the reason for the multiple leads on the testing circuit is for the sole purpose of making it adaptable to all types of control. There is a plug on this parallel hookup for every type of terminal connection on any control made to date.

Construction of Control Tester



Above — This schematic drawing illustrates the construction and hook-up of the control tester used by Associated Refrigerator Plant, Inc., Philadelphia, in its rebuilding of household refrigerator units. Component parts of this system include a Kelvinator twin-cylinder pump, a small Mayson expansion valve, and a boiling bowl made out of copper tubing wound inside a hollow shell. To speed up the process of cycling the control, a hot gas defrosting system is used.

At left—Here is the Associated Refrigerator Plant's control tester in actual operation. It is housed in the frame of an old standard model Frigidaire, with edges trimmed and back and sides cut out to facilitate installation and servicing of the high side.



User's Testimonials Basis of Promotion Of Commercial Firm

NEW ORLEANS—Consistent follow-up of every user of its commercial equipment to obtain testimonials for use in a year-around direct-mail program has proved a most effective new-business builder for Frigid Refrigeration Service Co., Westinghouse commercial dealership.

After sufficient time has passed for the new commercial user to become thoroughly acquainted with the equipment, the company's salesman who handled the deal calls back, asking permission to photograph the installation and publish a statement from the owner as to his satisfaction with the job.

More than 90% of the users contacted are agreeable to the idea, reports George W. Mims, head of the dealership. Frigid Refrigeration Service budgets approximately \$4 per user for the cost of photographing the installation, and making up a direct-mail piece of the testimonial for use in contacting other business places who could use similar equipment.

Typical of the company's promotional use of testimonial materials is one concerning Gele's Meat Market & Grocery in suburban New Orleans. Four months elapsed between the sale and the call-back, and the request for photographs and a testimonial letter. The letter and photos (including one of the display case and another of Mr. Mims) were made into an attractive sepia-tone folder, which was sent to 80 meat market-owner prospects.

Within a month, the folder mailing was responsible for the sale of seven additional display cases, and a number of beverage coolers, in similar locations, Mr. Mims reports.

"You can't expect to get business without spending a little money to reach it," says Mr. Mims. "Although our direct-mail pieces costs us a little more than any other one type of promotion, we have found results well worth the cost."

The same idea is used by the company to promote sales of walk-in and reach-in units, beverage coolers, and other types of commercial equipment which it sells. Not only do such promotion pieces open the door to approaches by salesmen, but in many cases influence the sale all by themselves, Mr. Mims declares.

Wolverine Tube Builds Seamless Accumulator

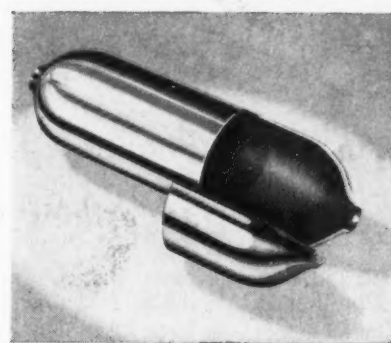
DETROIT—A seamless copper accumulator shell that combines many advantages, including simple one-piece construction, and low cost, has been announced by the Wolverine Tube Co.

In the refrigeration industry it is often necessary that a comparatively large volume of refrigerant be accumulated in one place, or that exceptional expansion be accomplished in fluid or gas lines.

Until recently, the accumulators or receivers which help accomplish this have been made of metal stampings or a combination of tubing and stampings, welded or brazed together.

Engineers at Wolverine Tube Co., however, have developed a reducing operation (not to be confused with spinning) which enables them to produce various sizes of accumulator shells from copper tubing, the whole unit being one piece of metal.

It will be noted that this method makes it possible to obtain complete closure or necking of a tube within a limited space. Thus, a one-piece copper accumulator shell is available. Position and sizes of openings at the ends or sides are optional, and the whole piece can be made at a very low cost.



This cut-away photograph shows the construction of the new one-piece copper accumulator shell built by Wolverine Tube Co.

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MODEL LOO: Low Pressure Control without High Pressure Cut-out.

MODEL LOH: Low Pressure Control. Includes High Pressure Cut-out. Double unit case.

Overload protection is available in any model as desired.

Why Heat Exchangers Can Cut Operating Costs 15%

An Explanation of Their Effect In a System, And Suggestions on Their Installation

PITTSBURGH—How the use of suction-liquid line heat exchangers can bring about a 15% reduction in operating costs as well as other benefits in creating greater efficiency in the system was described to members of the Pittsburgh section of the American Society of Refrigerating Engineers at their meeting early this month by K. M. Newcum, vice president, Superior Valve & Fittings Co.

The most generally used application of heat exchangers is near the evaporator outlet, Mr. Newcum explained. Without an installation of a heat exchanger at this point, he said, a substantial portion of the evaporator is used for superheating the refrigerant vapor.

"Summarizing the operation of a system without the heat exchanger," said Mr. Newcum, "it is reasonable to assume that the evaporator is deprived of at least 15% of its ability to do effective refrigeration work, because it must (1) cool incoming liquid, (2) accommodate excessive flash gas, and (3) superheat or 'dry' the gas leaving the

evaporator.

"A dryer coil attached to the outlet of the evaporator could be used to accomplish point (3), namely, 'dry' the gas after it has left the evaporator. This still leaves points (1) and (2) to be considered.

"Let's now install a heat exchanger of the proper capacity on this refrigeration job as shown in Fig. 1. The six thermometers almost in themselves tell the story.

RESULTS TO BE EXPECTED

"It is reasonable to assume that heat exchangers, properly selected and installed, should accomplish the following:

"1. Improve the 'quality' of the entering liquid, i.e., reduce its temperature, and reduce flash gas.

"2. Permit active (wet) refrigerant to circulate through the entire evaporator. This results in:

"(a) The active use of nearly 100% of evaporator surface.

"(b) Increase in suction pressure.

"(c) Lower degree of superheat.

"3. Vaporize and superheat all wet refrigerant which leaves the evaporator. This prevents:

"(a) Suction line or lines from frosting outside of refrigerated space.

"(b) Liquid or 'wet' refrigerant from entering compressor.

"4. Superheat to a higher degree the suction gas which enters the compressor. This results in increased compressor displacement capacity.

"Disregarding for the moment point 4, numerous comparative tests conducted by competent engineers all indicate that the average decrease in operating time and current consumption when lowside heat exchangers are used, is 15%.

SAVINGS REALIZED

"Viewing this from the merchant's angle, we could use as an example an average commercial plant, which without heat exchangers is costing \$20 per month for electric current. Fifteen per cent of \$20 is \$3 per month, or \$36 per year. The investment in heat exchangers could easily be amortized in one year or less."

There is at this time no uniform method of rating heat exchangers for capacity selection purposes, said Mr. Newcum. Each manufacturer establishes a rating in B.t.u. per hour, square inches of surface, or

what have you. However, tests are now under way by A.S.R.E. member David Crampton, of Kooler-Keg division of Wallace & Tiernan Co., to establish uniform procedure for testing and rating heat exchangers.

According to Mr. Newcum, principal conditions affecting the performance of a heat exchanger are (1) the temperature at which the refrigerant vapor from the evaporator enters the exchanger, and (2) the corresponding temperature at which the liquid refrigerant enters the exchanger.

The function of a heat exchanger is obviously to utilize the cooling effect of the cold refrigerant leaving the evaporator to reduce the temperature of warmer liquid to the lowest possible degree, and conversely to utilize the heating effect of the warmer liquid to increase the temperature of the colder refrigerant from the evaporator to the highest possible degree, the ideal condition being (1) to increase the temperature of the gas leaving the exchanger to equal the temperature of the liquid entering the exchanger, and (2) to decrease the temperature of the liquid leaving the exchanger to equal that of the refrigerant entering the exchanger.

Such an ideal condition is not practicable, nor is it economically sound, for the cost of such a heat exchanger would be prohibitive, said Mr. Newcum.

"What, practically, we aim to accomplish with nominally priced heat exchangers," said Mr. Newcum, "is to raise the temperature of the suction gas sufficiently to permit frosting and sweating of the suction line and at the same time effect an appreciable decrease in the temperature of the liquid leaving the exchanger and entering the evaporator.

"The majority of heat exchangers now on the market are designed and rated to produce practical, not ideal, results.

WHERE TO LOCATE IT

"The question of whether to locate the thermostatic expansion valve bulb between the evaporator and heat exchanger, or beyond the heat exchanger, is more a matter of choice than design. If the bulb is located near the heat exchanger on the evaporator side as shown in Fig. 1, the expansion valve should be adjusted to maintain a sufficiently low superheat to assure active use of the entire evaporator—the 'superheating' being done in the heat exchanger.

"Locating the bulb beyond the exchanger requires that the superheat be adjusted to control the frost line at some point within the exchanger. This generally results in a theoretically higher superheat adjustment.

"Most heat exchangers may be installed horizontally, vertically, or inverted. If installed 'inverted'—i.e., with the refrigerant from the evaporator entering the bottom and leaving the top of the exchanger, an accumulator effect is obtained. This is desirable in many applications, especially on low temperature jobs where surging is a factor.

"Some heat exchangers are so designed that they might trap oil if installed horizontally. Oil trapping is, of course, to be avoided.

BE SURE IT'S HOT

"To get the most work out of a heat exchanger, all possible care should be exercised to see that the liquid refrigerant enters the exchanger at as near as possible the temperature at which it left the condensing unit.

"In explanation: If the liquid refrigerant, by contact with cold surfaces, etc., gives up its heat content before entering the exchanger, then it will have little or no heat to impart to the refrigerant from the evaporator. Hence its heat exchange effect will be neutralized or nil. The heat exchange effect should be concentrated in the heat exchanger.

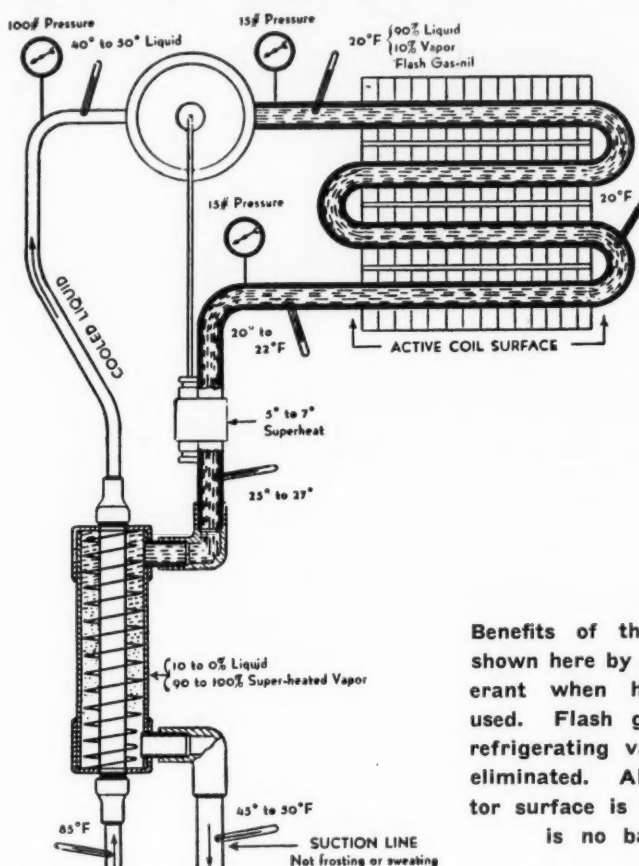
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Fig. 1—Heat Exchanger Installed Near Coil Outlet



Benefits of the heat exchanger shown here by condition of refrigerant when heat exchanger is used. Flash gas, which has no refrigerating value, is practically eliminated. All of the evaporator surface is utilized, and there is no back-frosting.

"I think we all are in general agreement with the fact that liquid or 'wet' refrigerant should not be permitted to enter the compressor," said Mr. Newcum in discussing another phase of heat exchanger work. "Whether or not the refrigerant entering the compressor is 'wet' is generally determined by the temperature of the suction line, that is, if the suction line is not frosting or sweating near the compressor, we assume the condition to be ideal, hence no further consideration is given to the 'effect of the suction gas temperature upon the performance of the compressor.'

"In a very interesting paper prepared by A.S.R.E. member E. R. Wolfert, air conditioning engineer of Westinghouse Electric & Mfg. Co., East Springfield, Mass., which was presented at the 1940 Spring Meeting of A.S.R.E. at Skytop, Pa., were given results of a series of tests covering the effect of the suction gas temperature upon the performance of compressors.

"The test results given in Mr. Wolfert's paper substantiate the findings of other compressor engineers, namely, that higher temperature (highly superheated) gas entering the compressor has a very favorable effect upon both the capacity and overall efficiency of refrigerating machines.

WHY CAPACITY INCREASES

"It is interesting to note from the results that the capacity increased in direct proportion to the increase in suction gas temperature. At 10° F. the capacity was assumed to be 100%. At 80° F. the capacity increased 17.7%. B.t.u. per hour per watt follows a similar curve, while motor input increased only four-tenths of 1%.

"It is pertinent to note, however, that increasing the suction gas temperature by some outside means, such as a steam jacket or electrical heating unit, will not accomplish this capacity increase.

"The heat required to increase suction gas temperature should be taken from the liquid refrigerant—preferably by means of a heat exchanger.

"The capacity increase with higher temperature suction gas is explained as follows: Suction gas, at any temperature below 80° F. is not, according to my source of information, completely dry; that is, there are particles of unexpanded (wet) refrigerant entrained therein.

"When this unexpanded refrigerant enters the cylinders and comes in contact with the comparatively hot cylinder walls, it 'flashes.' The 'flashing' within the cylinder chamber, creates momentarily an expansion or higher pressure therein. This sudden expansion retards the entrance of additional gas and consequently the cylinder is not completely filled with refrigerant gas.

The net result is that the displacement of gas by the piston or pistons is proportionally decreased. Conversely, if the gas is heated to 80° F. or thereabouts, it is presupposed that all the gas entering the cylinder chamber is dry, hence complete displacement results.

"Many condensing unit manufacturers now are rating their machines at 80° F. entering suction gas temperature. Therefore it is increasingly important that this factor be taken into consideration when calculating a job.

"The 80° F. suction gas requirement throws light on a new problem in the application of heat exchangers.

"Refer again to Fig. 1 and note that the temperature of the gas leaving the exchanger is 45° to 50° F.

"It is possible, with high room temperatures and long suction line runs, for the gas to pick up sufficient superheat enroute to the condensing unit to raise its temperature to 80° F. However, such conditions do not always exist, and for that reason it becomes increasingly important that definite provisions be made at time of installation to assure the desired entering gas temperature.

"Research on this problem now is being conducted by engineers in A.S.R.E. member Lars Hanson's department at Carrier Corp., Syracuse, N. Y., and also by our company.

"Indications are that 80° F. entering suction temperatures may be assured by installing a master heat exchanger in the suction-liquid line, outside of the refrigerated space, and in close proximity to the condensing unit. This arrangement may be used in conjunction with individual exchangers within the refrigerated space or separately—depending upon design requirements."

Miniature Ice Rink In Show Window Built From Used Parts

(See Picture on Page 1)

NEW ORLEANS—A miniature of the ice skating rink installed in the city auditorium in connection with the "Ice Capades," skating revue, drew crowds to New Orleans' famed Canal St. during its two-week display in a window of Godchaux's department store.

Built from 18 feet of coils and other left-over equipment from the full-size ice rink installation by George W. Mims of Mims Refrigeration Service Co., the miniature rink, complete in every detail, measured 7 feet long by 3½ feet wide, and was powered by a 1½-hp. Westinghouse compressor.

Compressor, valves, and other equipment were shown in operation in the tiny rink. Snow formed atop the ice by melting was brushed off daily. Cutouts of various stars in the ice revue were placed on the rink to add "live" interest to the display.

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Complaints and Remedies In Servicing Counter-Freezers Which Use Brine

Methods of Servicing Russ Freezer Model 200

Editor's Note: This article is the final one in the series dealing with the servicing of brine-type counter freezers, dealing specifically with the Russ models. The next installations will discuss direct expansion type counter freezers.

By Arch Black and Dean C. Seitz

Complaint No. 1—Freezer Motor Overheats and Shuts Off In Middle of Batch

Cause 1: Freezing cream too stiff or low voltage—check with the power company.

Effect: Indication of low voltage is that the motor will become extremely hot even though running under a light load.

Cause 2: If the packing nut (No. 7 in Fig. 13) is too tight an excessive load is thrown on the motor, or if through lack of lubrication, the bearing and shaft score, this will also tend to overheat the bearing, throwing an excessive load on the motor.

Effect: First batch will run approximately normal time, second

batch slows down, third batch will be slower than the second, and so on until the motor overheats.

If this condition arises, be sure to note the brine temperature before deciding that the trouble is in the bearing or packing nut. As the brine temperature rises the freezing time increases.

Remedy: If the overheating is caused by the packing nut being too tight, loosen nut a quarter of a turn. If it is due to scored drive shaft, have shaft and bearings smoothed out.

Unless there is considerable wear between the two parts, it will be unnecessary for replacement as there must be at least .005 inch clearance between the drive shaft and the bearing; .015 is not too great a clearance for good operation. The

and then loosen a quarter to half a turn. Also be sure that the motor pulley lines up directly with the freezer pulley.

Be sure the packing nut is not too tight as it will place an excessive load on the freezer motor.

Before leaving the job check the belt tension of the brine pump and freezer.

Replacement of Parts

HOW TO REPLACE FRONT FREEZER BEARINGS

To remove the front bearing, loosen the screw in the center of freezer door, tap lightly and the bearing can be easily pushed out. Before installing the new front bearing, be sure the rest of the equipment that needs servicing is replaced. Test the dasher for end play. One should be able to feel a slight end thrust. If there is too much clearance, stainless steel shims should be placed back of the front head bearing until the play has been taken up.

HOW TO REMOVE MOTOR

While there are several ways to remove the motor, the following is the fastest and easiest.

To remove or replace the motor see Fig. 10, first take off the freezer hood by removing the back throat. Next, remove the screws around the front freezer head and back frame, then lift off the stainless steel hood. Disconnect the tie rod between the front head and back frame.

Loosen the back frame so that it can be laid to one side of the freezer, then remove the brine pump belt. Loosen the belt on the spring of the freezer belt adjustment screw, block up the motor so as not to stretch the belts when removing. Next, loosen the set screws on the freezer pulley, pull it off and loosen the bolts, holding the motor to the motor base. It can then be easily removed.

Upon reinstalling the motor, be sure that the motor pulley is lined up with the freezer pulley, also in doing so be sure that the packing nut has not been tightened too tightly as it will throw an excessive load on the motor. If the motor pulley has been taken off, be sure that when it has been replaced it is located as close to the bearing as possible without rubbing the frame of the motor.

HOW TO REPLACE REAR BEARING AND DRIVE SHAFT

To change the rear bearing and drive shaft, remove the freezer belt, loosen the set screw on the freezer pulley, and pull the freezer pulley off the drive shaft, take out the dasher, push the drive shaft into the freezer then loosen the bearing packing adjustment nut (No. 7 in Fig. 13).

Screw this all the way out, install the new bearing, push in the new drive shaft and replace parts. Upon adjusting the new rear bearing and packing nut, be sure that the nut is snugly tight, then loosen it approximately half a turn. This will enable the service engineer to determine whether or not the packing is in place, and by rotating the freezer pulley he can test the ease of rotation, which will give him tension on the packing.

HOW TO REMOVE THE TOP OF HARDENING CABINET

To remove the top of hardening cabinet refer to Fig. 8 (Oct. 16 issue). To remove the stainless steel top first remove the thermometer (No. 5 in Fig. 8).

Next remove the covers then the rubber breaker rims which can be

seen in Fig. 8. This will leave only the outside clips holding the edge of the stainless steel top. By removing the black porcelain base, the angle iron trim and flat trim can be pushed down. Push the trim down approximately 1 inch on the operator's side. Take out the screws holding the clips that keep the stainless steel top in place.

On the back corner of the freezer there is a joint between the two tops, namely the stainless steel over the hardening cabinet and the stainless steel around the freezer.

Take either a hot soldering iron or a torch and slightly heat the stainless steel, as the cabinet tops are sweated at this point. After

separating the joint the top can be lifted off from the operator's side, lift it far enough to clear the plywood top. Then by a slight push the opposite side can be pushed off the clips.

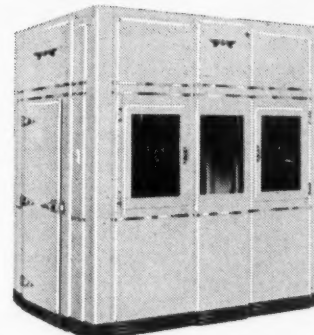
To remove the top of the hardening cabinet, loosen the brass screws that hold the plywood top in place. After these have been removed, the top can be lifted off and the inside of the cabinet is readily accessible.

Upon replacing, be sure all parts are placed in same location as when they were removed and that the stainless steel tops match up evenly, which can be done by reswearing.

When all has been replaced, clean and polish with Bon-Ami.

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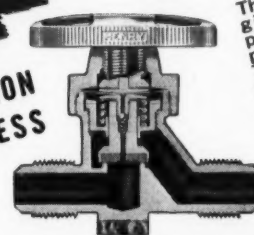
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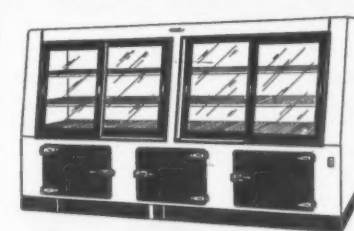
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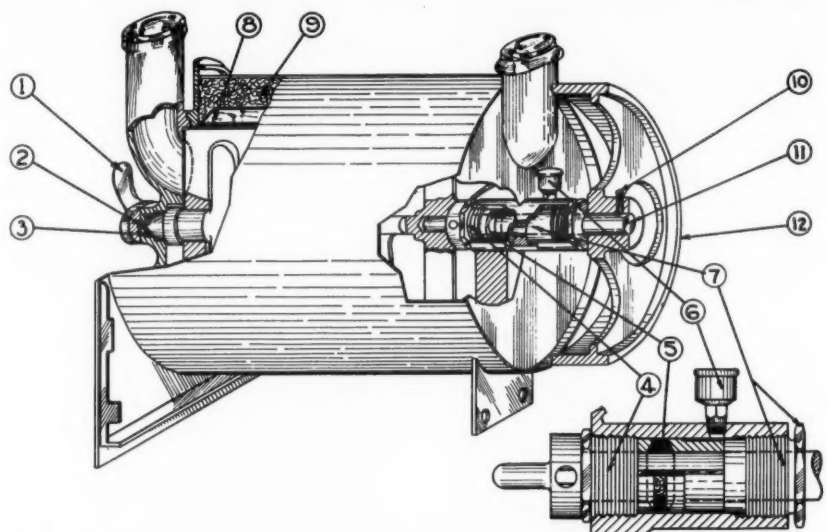
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Fig. 13—Details of Russ Model 200 Freezer



This diagram shows the detailed mechanism of the Russ brine-type counter freezer. Parts marked by numbered arrows are: 1—Clutch lever; 2—Front bearing locking screw; 3—Front head bearing; 4—Rear head front bearing; 5—Packing; 6—Grease cup; 7—Rear head back bearing and packing adjustment nut; 8—Brine jacket; 9—Insulation; 10—Drive shaft set screw; 11—Drive shaft; 12—Freezer pulley.

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grease should ooze out between the shaft and the bearing toward the pulley, rather easily.

When replacing the shaft, tighten the packing nut snugly and then loosen from a quarter to half a turn.

Complaint No. 2—Grease Working Into the Freezer

Referring again to No. 7 in Fig. 13, if grease should work past the seal into the freezer, it is a simple matter to remedy the trouble. Insert the bearing wrench between the spokes of the freezer pulley and turn the hex nut. Tighten the packing nut and then loosen it a quarter to half a turn.

The combination rear head back bearing and packing adjustment nut (see No. 7 in Fig. 13) is made of bearing bronze and after this has been adjusted you should be able to force grease into the bearing and have it ooze between the nut and the flywheel. If it becomes necessary to install a new packing, make the ring so that it just fits around the drive shaft and take particular notice that it is cut on a slant similar to that of a piston ring, so that when it is installed it makes a complete seal across the face.

When it is necessary to put in one of these rings, take off the brine pump belt, remove the freezer belt (it is usually well to hold a stick under the motor so that the tension will not stretch the last freezer belt), loosen the set screw in the pulley and remove the pulley from the drive shaft.

Unscrew the bearing and packing adjustment nut (No. 7, Fig. 13) until it can be pulled out. Press one ring of packing in place and replace nut. When the nut is replaced, be sure that it is tightened to the full extent

STAINLESS STEEL CONTROLS



Pioneered and perfected by Ranco Engineers! One of many "firsts" that have brought world leadership to Ranco Household Refrigerator Controls.

Ask your jobber!

RANCO INC.
COLUMBUS, OHIO

Alabama Locker Men Form State Group

AUBURN, Ala.—Organization of the Alabama Frozen Food Locker Association and election of D. H. James, Enterprise, as president; A. F. Norton, Tuscaloosa, as vice president; and Eric Alsobrook, Montgomery, secretary-treasurer, has been completed here.

The new organization is a non-profit association, and was organized to aid in spreading information and to assist with legislative and regulatory problems. The state association was affiliated with the National Frozen Food Locker Association.

Reports show that Alabama is leading all other southeastern states in the construction of freezer-locker and meat-curing plants.

All-Steel Locker Unit Has Three Drawers

AURORA, Ill.—A three-drawer "Froz-n-Food" locker unit with two door-type lockers stacked atop it has been announced by All-Steel-Equip Co.

This new set-up makes it possible for the locker plant operator to increase the number of drawer lockers in relation to the door type—a distinct advantage inasmuch as the drawer units invariably rent at a higher rate.

Both drawer and door lockers are 24 inches wide.

Exact dimensions of the individual lockers in the three-drawer unit are: width, 24 inches; depth, 30 inches; height, 16 inches. Overall height of the unit is 49½ inches.

More Locker Show Shots



Carl J. McGrew, sales manager of McGrew Machine Co., Lincoln, Neb., proudly shows his company's line of newly styled Sanilok lockers to Jean Reis, of Locker Patron's editorial staff, when she visited the McGrew booth at the recent national locker convention in Chicago.



F. F. Antelline, J. B. Edwards, and H. J. Schwartau of General Refrigeration division, Yates-American Machine Corp., Beloit, Wis., talk things over in their company's booth at the locker show.

Texas Locker Plant To Freeze & Store Eggs

CLEBURNE, Tex.—Facilities for the quick freezing of 200 cases of eggs daily, and for the storage of 1,000 cases, are being included in the 600-locker cold storage plant being erected here by T. V. Lasson's Frigidice Co.

Having observed the success with which broken and frozen eggs have been handled in the larger marketing centers such as Fort Worth and Dallas, Tex., Mr. Lasson decided that a corresponding opportunity lay open for the smaller operator in a rural community such as Cleburne. The new plant now under way is a result of that conviction.

Six-hour freezing will be provided in this plant, and Mr. Lasson expects to handle approximately 10,000 cases of eggs annually.

"I simply believe that if the big fellow in the city can make money handling eggs in this manner, Mr. Lasson explains, "there is no reason why the little fellow in the smaller community can't."

"After all, the eggs must be shipped to the big-city freezing plants and then be shipped back to the users. I intend to serve the users in my own particular area."

Anchorage, Alaska To Get Its First Locker Plant

ANCHORAGE, Alaska—A refrigerated storage locker plant, first of its kind to be established in this vicinity, is scheduled to be erected here by Vern Johnson.

The Frigidaire-equipped plant will comprise a 14 x 28-foot cool room for storage of beer and other items, a 14 x 16-foot meat room, a chill room, and a quick-freeze room.

For Information on Motors
FOR ALL TYPES OF
Air Conditioning and
Refrigeration Equipment
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Solves Many Coil
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CAMPBELL REFRIGERATOR CO.
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ASE Froz-n-Food Lockers
Sold Only Through Dealers
Will Add to Your Income
Quickly, Easily
Write for Descriptive Folder
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WATER COOLERS—FILTERS
to comply with
U. S. NAVY—ARMY Specifications
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commercial compressors
are Efficient, Sturdy
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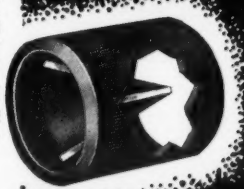
A convenient new tool which makes possible a rapid and efficient reaming job on both the inside and the outside edges of copper, brass or aluminum tubing.

Tubing is introduced from one end of tool for inside reaming, and from the other end for outside reaming. The tool cuts in either direction and is self-centering. It has three hardened, hollow ground tool steel cutters. The cutters are protected against damage when not in use, by outside shell of tool. Body is knurled for easy handling. Handles all sizes of tubing from 3/16" O.D. to 1½" O.D.

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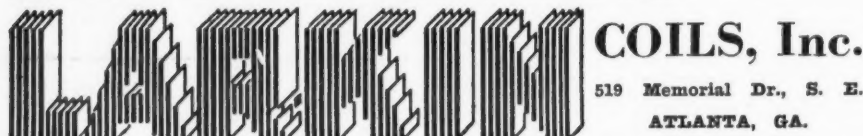
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Price, each, \$1.20



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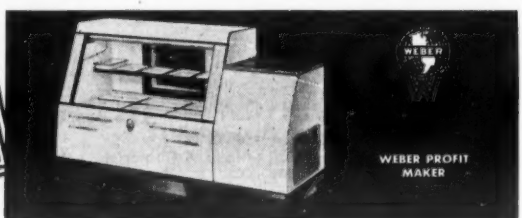
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Faster Models to Stock • No Discharge Free Service • "Cooling Control" on Cut Out or Cut In
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Refrigeration Control

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by TORRINGTON
THE TORRINGTON MANUFACTURING CO. of TORRINGTON, CONNECTICUT

Clubwomen Rent 100 Lockers In One Month For Marshall, Texas Plant

33-1/3% Commission Serves As Stimulus

MARSHALL, Tex.—If you want to rent the frozen food storage lockers in your plant quickly and easily, try transforming one of the local women's clubs into your sales organization by the simple expedient of offering a substantial commission on each locker rented.

That's just what the Marshall Frozen Foods Co. did . . . and it worked.

Anxious to get its plant up and in operation, the company departed from the orthodox procedure of signing up patrons in advance, and instead built the plant first.

Once it was completed, the three owners—President Harold Smith, Vice President H. A. Stevens, and Secretary-Treasurer Q. C. Murphy—started casting about for a means of filling it with customers.

Mr. Smith was the one who conceived the club angle. Knowing that one of the women's organizations at a local church was eager to raise money, he offered to pay the group a 33 1/3% commission on every locker rental contract secured by its members. He left all questions of sales plans and territories up to the club itself.

COMMISSION IS HIGH

The commission, Mr. Smith admits, is a bit high, but he feels that the company can afford to pay it inasmuch as the club itself handles all problems of sales management and the firm has no other sales expense.

Did the scheme work? Well, within the first month the club members had corralled a total of 100 locker renters.

Only other methods employed to sell the locker plant's services and facilities have been the personal contacts of the three owners and the efforts of a single salesman. This salesman was paid a flat rate of \$2 for every full-year rental contract secured.

The Marshall plant contains 260 All-Steel-Equip Co. lockers in three different sizes. Space is available,

however, for a total of 510 lockers. Cooling is supplied by Baker refrigeration equipment. In addition to the usual processing rooms, the plant has a smoke room with space for 48 hams.

The company operates a modern grocery store and meat market in the front section of the building which houses the locker plant.

The Marshall firm tries to sell all customers on the idea of having all their meats processed at the plant, and reports that this campaign has been more than 75% successful. Processing charge is 2 cents per pound. If the customer does his own processing, a 1-cent-per-pound charge is made for chilling and aging.

EFFECTIVE JOB TICKET

The company has devised a simplified "working ticket" for processing orders that minimizes the possibility of misunderstanding by showing the customer not only what he requested but also how his instructions were carried out. The card is in two sections, separated by a perforated line.

On the top section of the card, space is provided for the customer to specify the number of roasts, chops, steaks, etc. that he desires from his meats. Room for special instructions—such as whether steaks should be sliced thick or thin—also is provided.

Other section of the form is for the use of the processor. He keeps the customer's section before him as he handles each particular job, and follows instructions as closely as possible. On his half of the ticket he indicates the number of each kind of cut which he is able to obtain from the carcass in question, and naturally tries to make this figure correspond as nearly as possible with the customer's requests.

In addition, this bottom section of the card contains space for entering the total number of pounds of meat processed, and the charge for the job. Other cost items, such as grinding or seasoning, also are listed.

Air Conditioning For Blast Furnace Ends 'Weather Guessing'

(Concluded from Page 1, Column 3)

Ordinarily, wide fluctuations in humidity cause irregular blast furnace operation, which results in less iron production. On hot, humid days, more coke must be charged per ton of iron to offset the excess moisture in the air, which is blown into the furnace at the rate of 80,000 c.f.m. This air carries with it into the furnace 7 tons of water per day for every grain of moisture content per cubic foot, which has the effect on extreme days of pouring 30 or 40 tons of water into the furnace.

With an air blast of constant humidity, it is possible to control the silicon content and iron temperature within narrow limits which are two major factors having a direct bearing on steel quality.

With such iron, the production of steel by both the Bessemer and open hearth processes can be increased.

The air conditioning equipment, which will be furnished by Carrier and installed by Dravo Corp. of Pittsburgh, conditions the air by drawing it through two chilled water sprays, then passing it through eliminator plates where excess moisture is removed. Refrigeration is furnished by a centrifugal machine.

89,924 Household Electric Refrigerators Sold By 13 Nema Companies In October

The following 13 companies reported sales to the Refrigeration Division of the National Electrical Manufacturers Association (Nema) on household electric refrigerators for October, 1940:

Apex Electrical Mfg. Co., Crosley Corp., Edison General Electric Appliance Co., Inc., Frigidaire Div. General Motors Corp., Gale Products Div. Outboard Marine & Mfg. Co., General Electric Co., Gibson Electric Refrigerator Co., Kelvinator Div.

Nash-Kelvinator Corp., Leonard Div. Nash-Kelvinator Corp., Norge Div. Borg-Warner Corp., Stewart-Warner Corp., Sunbeam Electric Mfg. Co., and Westinghouse Electric & Mfg. Co.

The sales of the reporting companies include units manufactured for the following concerns: Montgomery Ward & Co., Potter Refrigeration Corp., and Sears, Roebuck & Co.

SALES FOR OCTOBER, 1940

	Domestic	Canadian	Other Foreign	Total
Lacquer (Ext.) Cabinets Complete				
1. Less than 4 cu. ft.	1,664	44	593	2,301
2. 4 to 4.99 cu. ft.	9,155	587	1,369	11,111
3. 5 to 5.99 cu. ft.	3,239†	357	1,038	4,634
4. 6 to 6.99 cu. ft.	54,236	756	1,708	56,700
5. 7 to 7.99 cu. ft.	944	1	5	950
6. 8 to 8.99 cu. ft.	8,247	36	370	8,653
7. 9 to 12.99 cu. ft.	92	...	...	92
8. 13 cu. ft. and up	13	...	17	30
9. Total Lacquer	77,590	1,781	5,100	84,471
Porcelain (Ext.) Cabinets Complete				
10. Less than 5 cu. ft.	...	...	...	...
11. 5 to 5.99 cu. ft.	58	3	39	100
12. 6 to 6.99 cu. ft.	3,192	3	180	3,375
13. 7 to 7.99 cu. ft.	...	...	...	...
14. 8 to 8.99 cu. ft.	847	...	64	911
15. 9 to 12.99 cu. ft.	87	...	14	101
16. 13 cu. ft. and up	245	3	18	266
17. Total Porcelain	4,429	9	315	4,753
18. Total—Lines 9 and 17	82,019	1,790	5,415	89,224
19. Separate Systems, 1/4 hp. or less	...	...	700	700
20. Total Household	82,019	1,790	6,115	89,924
Value Index*	215.0	267.0	54.9	180.0

*Based on weighted sales for 1934, 1935, and 1936. †Includes sales and credits.

Note: Beginning with the month of August, domestic sales of separate systems were reported as complete units while household evaporators, condensing units, and cabinets were dropped from the report entirely.

Household Sales Reach New October High

(Concluded from Page 1, Column 4) established during 1937. Shipments in October of last year reached 71,000 units.

1940 now is definitely the No. 1 year in household refrigeration history. The October shipments total puts the year several thousand units ahead of the previous all-time record of approximately 2,600,000 units, established in 1937. With two months still to be added to the present year's total, the industry may well anticipate that shipments will easily pass the 2,800,000-unit mark, especially in view of the heavy Christmas promotions now being staged by most major manufacturers.

World shipments by members of National Electrical Manufacturers Association hit a new all-time October record of 89,924 units, to bring 10-month shipments by Nema firms to 2,477,139 units. Shipments in the U. S. alone amounted to 82,019 units during the month, for a 10-month total of 2,347,157 units. Canadian shipments amounted to 55,704 units, and foreign shipments to 74,278 units, during the 10 months.

Shipments of 6-foot models totaled 60,075 units during the month, 56,700 of these having lacquer exteriors and the remaining 3,375 being all-porcelain units. Four-foot models for apartment house installation ranked second in shipments, with 11,111 units, with 8-foot units not far behind, with a total of 9,564.

Icebox Roundup Did Not Violate Commission Rules

(Concluded from Page 1, Column 1)

trade-in allowance constitutes a rebate or an unjust discrimination prohibited by law. After a prolonged hearing, in which several hundred pages of testimony were taken, the Public Service Commission held that there was no evidence that the participation of the Edison company in the campaign was in violation of the provisions of the Public Service Law. With that determination we are in full accord.

"The determination of the Public Service Commission should be confirmed, with \$50 costs and disbursements against petitioners in favor of the commission, and the appeal from the order of the Special Term transferring the proceeding to this court should be dismissed," the ruling concludes.

Counsel for the ice company declared that his client would seek leave for an appeal from the decision.

Sales By States

States and Territories	Household Low Sides October Cumulative
Alabama	717*
Arizona	328
Arkansas	420
California	7,691
Colorado	473
Connecticut	1,717
Delaware	201*
District of Columbia	1,069*
Florida	2,872
Georgia	1,311
Idaho	272*
Illinois	5,503
Indiana	1,634
Iowa	898*
Kansas	633*
Kentucky	821
Louisiana	994
Maine	116*
Maryland	951
Massachusetts	3,070
Michigan	4,163
Minnesota	1,504*
Mississippi	591
Missouri	1,297
Montana	285*
Nebraska	608
Nevada	86
New Hampshire	140*
New Jersey	3,611
New Mexico	88*
New York	14,309
North Carolina	704
North Dakota	156
Ohio	4,371
Oklahoma	528
Oregon	1,225
Pennsylvania	6,219
Rhode Island	435
South Carolina	504
South Dakota	167
Tennessee	1,162
Texas	2,895*
Utah	349
Vermont	50*
Virginia	1,232
Washington	1,752
West Virginia	394*
Wisconsin	1,376
Wyoming	127
Total United States	82,019
Canada	1,790
Other Foreign (Incl. U. S. Possessions)	6,115
Total for World	89,924

*Includes sales and credits.

Liquid Carbonic Adds To Ernst's Territory

CHICAGO — Three additional branch areas have been added to the territory covered by Jack Ernst, district ice cream cabinet sales supervisor for the specialty products division of Liquid Carbonic Corp.

For the past two years, Mr. Ernst has been supervising cabinet sales in the Boston, New York City, Philadelphia, Pittsburgh, and Buffalo branch areas. To this territory has now been added the Cleveland, Cincinnati, and Atlanta branches, giving him supervision of sales in most of the eastern half of the country.

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REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

POSITIONS AVAILABLE

COMMERCIAL REFRIGERATION Sales Supervisor—Opportunity for man who can both sell and organize his own department, specializing in beer cooling, reach-in refrigerators, bottle coolers, ice cream cabinets, etc. The name of the manufacturer is one of the oldest and most respected names in the industry. The city is located on the Eastern Seaboard having a trading population of a million and a half. The distributor is twelve years old with a sound financial set up. Write stating complete details including sales volume and earnings for the past three years. Box 1277, Air Conditioning & Refrigeration News.

FRANCHISES AVAILABLE

SEND FOR PRICES and literature on the General 1940 all streamlined refrigerator display case line. Over 40 years experience manufacturing good commercial refrigerators. On a comparative price test with other makes of equal specifications, prices are lowest in the country. GENERAL REFRIGERATOR & STORE FIXTURE CO., 5th & Bainbridge Sts., Philadelphia, Pa.

EQUIPMENT FOR SALE

COIN METERS for sale—Limited quantity of NEW Metermatic Coin Meters, No. M-11, 110 Volt, 60 cycle, 1/2 HP. for sale at reduced price. \$3.50 each. Write or wire us direct. Orders filled as received and only as long as stock on hand.

WEBER SHOWCASE & FIXTURE CO., INC., 5700 Avalon Blvd., Los Angeles, California.

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HERMETIC REBUILDING and Exchange Service General Electric—Westinghouse—Majestic and Grunow Units, Compressors and parts. Immediate shipment. Old unit can be returned later in our crate. We also exchange floats, Evaporators, Controls. Write for price list specify S8. SERVICE PARTS CO., 1101-03 N. 24th Ave., Melrose Park, Ill.

GENERAL ELECTRIC monitor top switches exchanged. Send your old switch and receive by return mail completely rebuilt and guaranteed (one year) unit. \$3.00 postpaid. NATIONAL ELECTRIC SWITCH CO., 1966 Broadway, New York, N. Y.

CONTROL REPAIR Service. Domestic controls reconditioned equal to new at a small cost. All work guaranteed for one year. Prices upon request. UNITED SPEEDOMETER REPAIR CO., INC., 342 West 70th Street, New York City.

PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. VAN DEVENTER (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

New Fall Prices on Parts Rebuilding or Exchange

Automatic Expansion Valves... \$1.25
Thermometric Expansion Valves... 2.75
Domestic Cold Controls... 1.75
Commercial Controls (Temperature or Pressure)... 2.00
Commercial Controls (Dual)... 2.50
1/2 H.P. Water Cooled Condensers... 7.50
1 H.P. Water Cooled Condensers... 12.50
(New Finned Tube used in all condensers)
Automatic Pressure Water Valves... 2.00
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Canadian distributor: Refrigeration Supplies Co., Ltd., London, Ontario

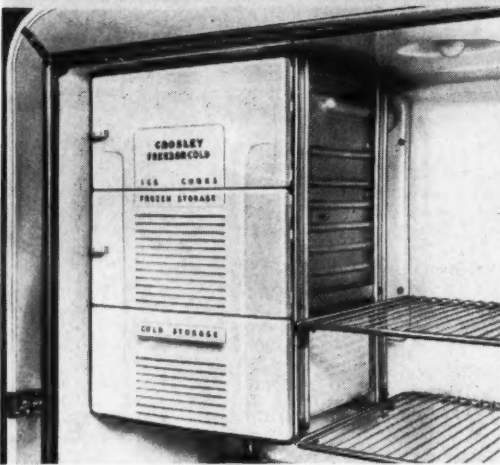
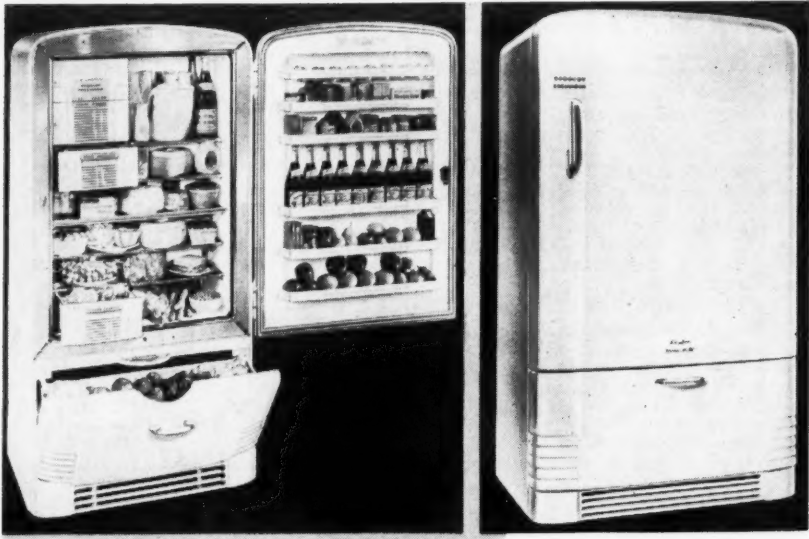
Soda Fountain Refrigeration

A set of two new manuals that every service man will want. Installation and service instructions on mechanically refrigerated soda fountains.
Manual SF-1 Contents: Chapter 1—Development of Mechanically Refrigerated Equipment. Chapter 2—"Two-Boiler" Creamer Unit. Chapter 3—"Thermo-Siphon" System. Chapter 4—"Three-Boiler" Soda Fountain. Chapter 5—Cooling System for Jar Enclosures. Chapter 6—Liquid Carbonic Fountains. Chapter 7—Rus Soda Fountain System. Chapter 8—Analysis of Service Complaints on Direct Fountains. 104 pages. Price \$1.00.
Manual SF-2 Contents: Chapter 9—Bastian-Blessing Fountain with Frigidaire Water Cooler. Chapter 10—Service Complaints and Remedies on Instantaneous Coolers. Chapter 11—Brunswick Fountain with Tempire Instantaneous Cooler. Chapter 12—Accessory Fixtures Multiplexed to Soda Fountains. Chapter 13—Condensing Unit Sizes—Basic Calculation Principles. Chapter 14—Carbonator Construction, Operation, Service Problems. 96 pages. Price \$1.00.

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These Are the New Crosley Features



Above—Exterior and interior of the new Crosley "Deluxe 8." Features include the re-styled "Shelvador" arrangement and the "Moist-Kold" compartment located beneath the glass shelf which divides the cabinet interior. At left—This "Freezorcold" section contains an ice cube compartment, a section for storage of frozen foods, and a meat drawer which also may be used for chilling fruit juices or bottled beverages.

(Concluded from Page 1, Column 1) electric current. All cabinets have a balloon-type door gasket.

One-piece, all-steel cabinets, double finished in baked enamel, are another major Crosley improvement for 1941. Bases are continuous with the structural steel frame, and terminate in four-point "gliders." Fiberglass insulation is used throughout.

The Crosley Electrosaver condensing unit has been refined to provide greater quietness. The condenser, with 16% more surface area than in 1940, lies flat below the compressor. It is cooled by natural convection, floor-level air reaching it through louvers which form a decorative exterior for the base of the cabinet. Refrigerant used is "Freon."

'MOIST-KOLD' MODELS

Two of the five new Crosley refrigerators, the DM-641 (6 cu. ft.) and the DM-841 (8 cu. ft.), are "Moist-Kold" models, incorporating refinements in the high-humidity system used by the company last year. The 1941 system incorporates a secondary coil placed out of the way against the rear of the "Moist-Kold" food chamber; a plate glass seal-shelf, and a simple, manually set moisture regulator known as the Ventil-air. Humidity in the "Moist-Kold" compartment is high, and the section contains a sealed Clear-Vision crisper in which humidity approaches 100%.

Two of the remaining five 1941 refrigerators are "Master" models, the SE-641 and SE-841. These 6 and 8-foot units incorporate all fundamental improvements of the "DM" series with the exception of the "Moist-Kold" system, including one-piece all-steel cabinet, Fiberglass insulation, refined Electrosaver unit, and the new Super Shelvador.

Features of the new "SE" series include an advanced type of Freezorcold evaporator, in which ice-making and frozen storage are facilitated by a two-door compartment; a defrost indicator that warns when the refrigerator needs defrosting; extra large cold storage chest for meats; glass-top crisper of increased size; shelf thermometer; a new temperature control panel located at the top of the condensing unit compartment door; a large Storabin for foods not requiring constant refrigeration; metal shelf supports; automatic interior light; and attractive, easy-acting, plastic-and-chrome exterior hardware.

All ice trays in every model in the new line are of the "quick release" type. Ice cube size has been increased, and each tray furnishes a full 2 pounds of ice. "DM" models are equipped with a deluxe type of quick-release tray. In all five new Crosley models, ice trays and grids are anodically treated aluminum.

Extra fast freezing of ice cubes is said to result from metal-to-metal contact of the refrigerant tube with the ice tray shelf. In "DM" models, the Freezorcold is a gold-and-Dulux finished ensemble located at the side

of the food chamber and incorporating ice making compartment, frozen storage chest, and meat storage tray. This design harmonizes with the gold-and-Dulux finished crisper used in the "DM" models.

The other three models in the line feature center hung evaporators, with styling and escutcheons which also harmonize with their meat storage trays and crispers.

Lowest priced 6-foot model among the 1941 Crosley refrigerators—the S-641—is claimed by Crosley executives to set "a new standard of value in 6-foot refrigerators." Definitely not a "stripped" model, the S-641 features a one-piece all-steel cabinet, Super Shelvador, Fiberglass insulation, enclosed ice compartment, moonstone meat storage chest, automatic light, and large size crisper.

The more than 200 Crosley distributors and executives of their organizations heard an encouraging report of business prospects for 1941.

DEALER ROSTER GROWING

Robert I. Petrie, vice president and general sales manager, reported that in the past 60 days more than 1,600 new radio dealers had been added to the Crosley organization, and that the sales of refrigerators this fall is well ahead of those of the corresponding period of the previous year.

The new line of Crosley refrigerators was presented to the convention by J. F. Crossin, manager of the refrigeration division. R. H. Money, chief refrigeration engineer, and John Craig, his assistant, spoke on engineering phases of the 1941 models. H. A. Newell, service manager, outlined service policies.

New line of Crosley ranges, washers, and ironers was presented by R. J. O'Connor, manager of the range and washer division. Mr. O'Connor stated that Crosley is becoming an important factor in the trade on these appliances, and described the improvements and new developments.

W. T. Wallace, who heads Crosley's radio division, reported increased sales of Crosley radios, radio-phonograph combinations, and recording sets, in discussing the radio market.

General advertising program of the company was presented by L. Martin Krautter, advertising manager, assisted by Roy S. Durstine, president of Roy S. Durstine, Inc., Crosley advertising counsel, and H. G. Little, agency account executive.

Theme to be featured in all advertising, Mr. Krautter said, will be "Food to the Front," emphasizing storage features of the new Super Shelvador.

The convention was opened by an address of welcome to the distributors by Powell Crosley, Jr., president. Raymond C. Cosgrove, vice president and general manager of the manufacturing division, told of the company's general program for 1941.

George E. Smith, vice president and treasurer, spoke on organization, management, and production.

Jackson, Miss. Dealer Gives Details Of His Christmas Sales Plan

(Concluded from Page 1, Column 5)

"We feel that the entire prospect list is open to Christmas promotion," Mr. Bruno pointed out, "including not only those originated during the holiday season but every one contacted during the year who does not buy for some reason. We maintain an active prospect list averaging 400 names, all of whom are subjected to our Christmas promotion between Nov. 25 and Christmas Day.

All appointments during the Christmas campaign are made during the evening, preferably immediately after dinner when husband and wife can be found together and in a receptive mood. No mention of the gift idea is brought out on the home call. Even if the call is made 10 days before Christmas, Better Living Appliance salesmen are careful not to mention the holiday—because it has been found that this kills the most valuable asset of all; the surprise element in the choice of a refrigerator as a gift.

On the next day the actual Christmas plan swings into action, when the husband is contacted by telephone at his place of business. At this time the salesman explains that he did not want to mention Christmas in the presence of the prospect's wife, and then suggests that it would make an ideal gift not only for the wife but for the whole family.

For selling this idea over the telephone, Mr. Bruno has developed an effective program of "merchandise

presentation" made up of four steps.

The steps are:

1. The practical nature of the gift, including the fact that it is needed more during the winter season, and that the prospect in time must buy one anyhow. In proving this point Better Living Appliances emphasizes food spoilage, bacteria control, and savings of from \$10 to \$15 on food through the winter season.

2. Deferred initial payments—whenever possible Mr. Bruno carries over the first payment to February, an important point to the customer whose income is already burdened with holiday expenses.

3. Special accessory inducements, including refrigerator sets, mixers, and other attractive extras. This, it has been found, outweighs mark-downs of any type and is a permanent sales builder in addition.

4. Playing up the ability of the firm to deliver the refrigerator wrapped with gay red cellophane bow and holiday trimmings on Christmas eve—this providing for the "surprise" feature most desirable for all gifts.

Husbands, it has been found, are invariably willing to spend a long period on the telephone discussing the plan, both because of the prior visit and the appeal of the suggestion made. At the close of the conversation he is invited to visit the showroom where final arrangements are made.

Prospects for this type of solicitation are derived from three sources:

1. A weekly 40-inch newspaper advertisement run for six weeks prior to Christmas, emphasizing refrigerators as "The Practical Gift"; 2. A direct-mail campaign going to 800 users of Jackson, asking for the names of potential December prospects; 3. The active prospect list maintained by Better Living Appliances, which is cleaned out every 45 days except for those prospects who show a possibility of a Christmas sale. From the latter, contacted for the second time, come the largest percentage of sales.

"We solicit men only for gift refrigerator possibilities," Mr. Bruno pointed out, "because the latter appreciate the fact that we are striving to make the refrigerator a pleasant surprise for their wives. Making this a major issue has proven to us that sentimentality is still a strong point in higher-priced gift merchandise of this type."

Mr. Bruno uses conventional window displays during the December period, designed to make refrigerators attractive to women, and trims the interior of the store on the same basis, with fireplaces built around refrigerators on display. The theme here is planting the idea with the woman—with the telephone husband-contact to complete the picture.

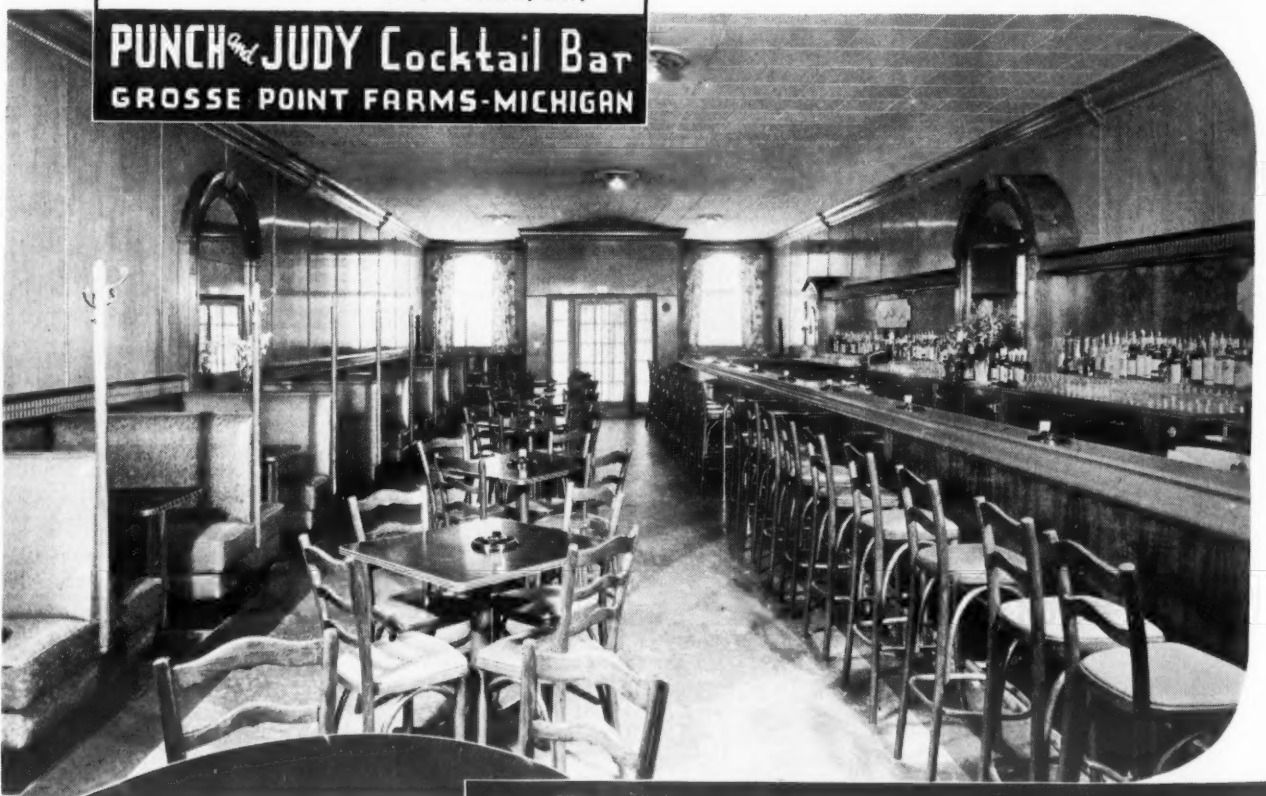
On Christmas eve, the company rents four extra delivery trucks and hires a large crew of delivery men to get every refrigerator to the buyer's home while the husband gets his wife out of the house on some pretext. This latter feature, although costly, is a great goodwill builder, and is one of the firm's strongest assets for Christmas selling.



VALVES Serve the
"Nation's Most Exclusive
Residential Section . . ."

("Life"—October, 1939)

PUNCH and JUDY Cocktail Bar
GROSSE POINT FARMS-MICHIGAN

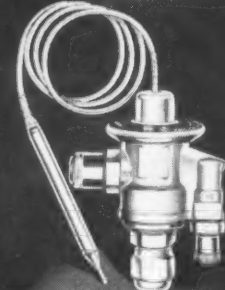


Where people of "Discrimination" gather for relaxation and refreshment, refrigeration must be **DEPENDABLE!** And so it is—at the large and beautiful **PUNCH and JUDY Bar**, in the exclusive Village of Grosse Point Farms, Michigan.

In the new cooling system recently installed here by the A. Claus Company of Cleveland, seven A-P No. 207 Thermostatic Expansion Valves are performing with their customary Dependability . . . Offering the last word in Refrigerant Control accuracy that makes the installation completely satisfactory to the Owner—and profitable for the Service Engineer.



Progressive Service Engineers
Use and Recommend—and Aggressive
Jobbers Stock and Talk—A-P Products.



Model 207
Thermostatic Expansion Valve

Used in the **PUNCH and JUDY Bar**, and in thousands of Cooling Systems throughout the country. Offers the advantages of small body size, large capacity, close accurate control, supersensitivity, easy superheat adjustment, and many other typical A-P features that make it a valuable unit on any installation.

A-P Valves add DEPENDABILITY to Refrigeration and Air Conditioning everywhere. To thousands of Engineers, this DEPENDABILITY in refrigerant control is so important that the thought of a substitute is impossible.

A-P DEPENDABILITY is worth money—to YOU, too! Cuts your service expense on new installations as well as on replacements—helps you build a longer list of satisfied customers—to increase your business. If you haven't already proved this in YOUR experience, start using A-P Valves NOW!

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